

SERGIO & SERGEI
A radio movie

Biography of the month
Nikola Tesla

PROPAGACtÓN NVIS

CELEBRATING 100 YEARS OF BRITISH BROADCASTING!

Medal in the name of ET Krenkel

Experiment with the counter antenna

Working Satellite APRS with the Anytone AT-D578UV Plus



Cover of this month:

Image courtesy of
BG0AUB Feng Zhao



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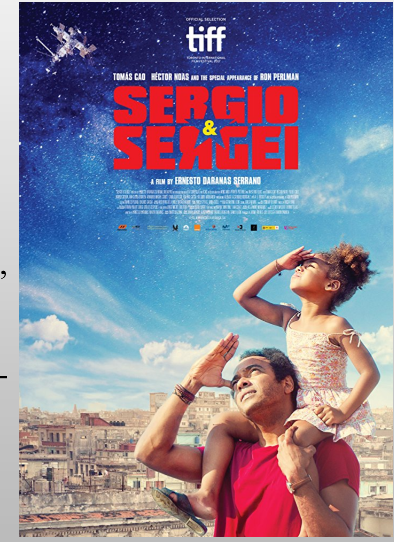
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This month we continue with our adventure.
Selvamar Noticias magazine and his stories are published in three languages:
Spanish, Catalan and English.
We know that the translations may not be the best but we will try to make them within what is considered logical.
Even so, if you detect and / or want to collaborate with the correction, you are invited.

VERSIÓ CATALANA

English Version





SERGIO & SERGEI
Una película de radio

From the director Ernesto Daranas

Synopsis

Year 1991. The former USSR disintegrates and Cuba enters into a great economic crisis. Sergio, radio amateur and professor of Marxism, does not know what to do to reorient his life. For his part, Sergei, the last Soviet cosmonaut, finds himself almost forgotten in the damaged Mir orbital station. Sergio and Serguéi communicate, starting a friendship that will help them face the changes taking place in their respective countries.

This in broad strokes would be the synopsis of the film for all audiences, but radio amateurs, due to its content, analyze other concepts such as:

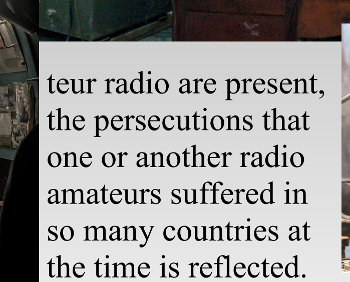
The difference in equipment between Cuba and the United States, in which the equipment used by the protagonists has the realism of the time,



The codes:

Listen to QSB, QSB or callsigns as real.

Honestly, it is a film worthy of being viewed by all radio amateurs since it is a film in which the values of amateur radio are present, the persecutions that one or another radio amateurs suffered in so many countries at the time is reflected.



But I want to close this article with a phrase from the film, but not without first encouraging you to see this great visual document.

“If you are a radio amateur, it does not matter what country you are from”

You can see the trailer at:

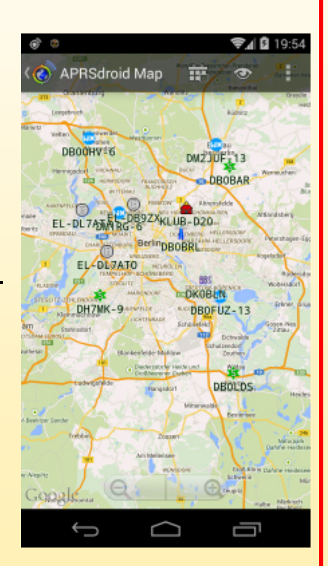
https://www.youtube.com/watch?v=duP-z1nXEAg&t=2s





Va de apps

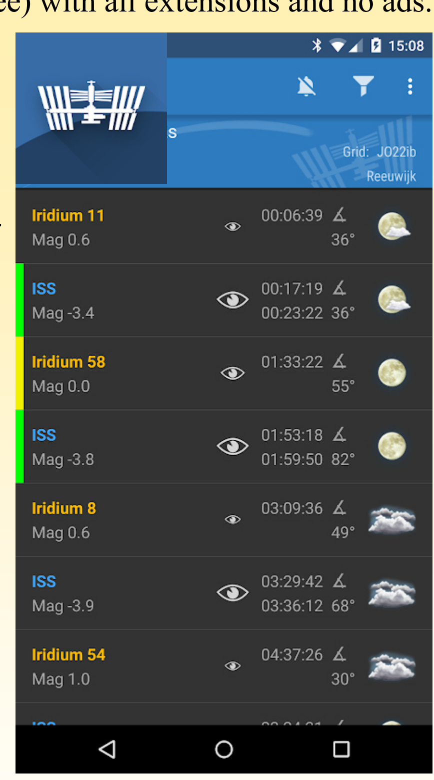
APRSdroid



APRSdroid is an android app for ham radio operators. It allows you to report your position to the APRS (Automatic Packet Reporting System) network, display nearby amateur radio stations and exchange APRS messages. APRSdroid is open source software written in Scala and licensed under the GPLv2. Features You can use APRSdroid to connect to the APRS network through different means: APRS-IS over the Internet (WiFi or mobile data connection) AFSK (audio connection between your radio and smartphone) Bluetooth serial connection to a TNC Once connected, you can beacon your presence, see what stations (amateurs and repeaters) are around, and send/receive APRS messages.

ISS Detector Pro [2.04.41 Pro]

Have you seen the International Space Station? You can actually see it in the night sky.
See the Starlink satellite train with the famous objects (included in the Filter menu).
If you like space or astronomy, you will like this ISS tracker app.
ISS Detector Pro includes the functionality of ISS Detector (free) with all extensions and no ads.
You can see more in the night sky:
amateur radio satellites
Track dozens of ham and weather satellites. Includes transmitter frequencies and Doppler shift calculations.
famous objects
Track Hubble, X-37B, Fitsat, Tiangong, rocket bodies and more. Most are visible.
comets and planets
Follow comets as they approach earth and become bright enough to see.
ISS Detector Pro will tell you when and where to look for the International Space Station or Iridium flares. You get an alarm a few minutes before a pass. You'll never miss a pass of the International Space Station and you'll never miss the bright flashes of iridium communication satellites. ISS Detector will also check if the weather conditions are correct. A clear sky is perfect for observing.



- Description of upcoming screenings
- Weather conditions for perfect sightings
- Notifications and alarms
- Share sightings on social networks.

ISS Detector combines data from Nasa, Heavens-above.com, minorplanetcenter.net, and yr.no weather.



What's cooking in Selvamar News



This month several of the components of the writing of this modest magazine have been awarded with the diploma granted by the ARRL at the request of the operators in gratitude for the collaboration and support.
Thanks a lot

Mejor generador de contenido audiovisual sobre radioaficion 2021

The plaque that recognizes the work carried out by Israel Roman (EA3TK) in his dissemination and training work on his YouTube channel is delivered.

As you know, the calendar is updated month by month. This month of February that has contests for all tastes.
If you want any activity or contest to appear, you cannot send the information to: Selvamarnoticias@gmail.com with the subject, calendar.





The Selvamar club is growing little by little, members have private sections, daily magazine updates, in addition to other sections that are created.
Go to our website and find out.

Stories, nets, opinions, and many other news on the different platforms in social networks.





GREAT GT-210

Once again I bring you another of the teams that I am sure many of you who have been in this amateur radio for a long time will remember.

This is the Great GT-210
From approximately the year 1980
It has 3w and 3 crystal channels, on one of its sides an input for external power and its external antenna input.
It is internally powered by 8 1.5v batteries housed in a battery holder.

It has a battery status checker and a high or low power selector.



In its large antenna we can see a small coil.

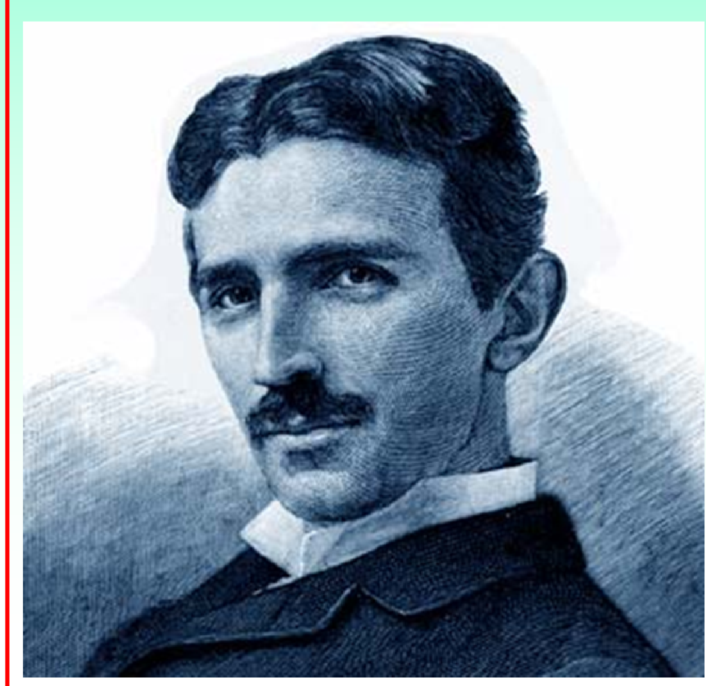
All this forms this beautiful team with an eighties essence.

EA1OK - VIRI



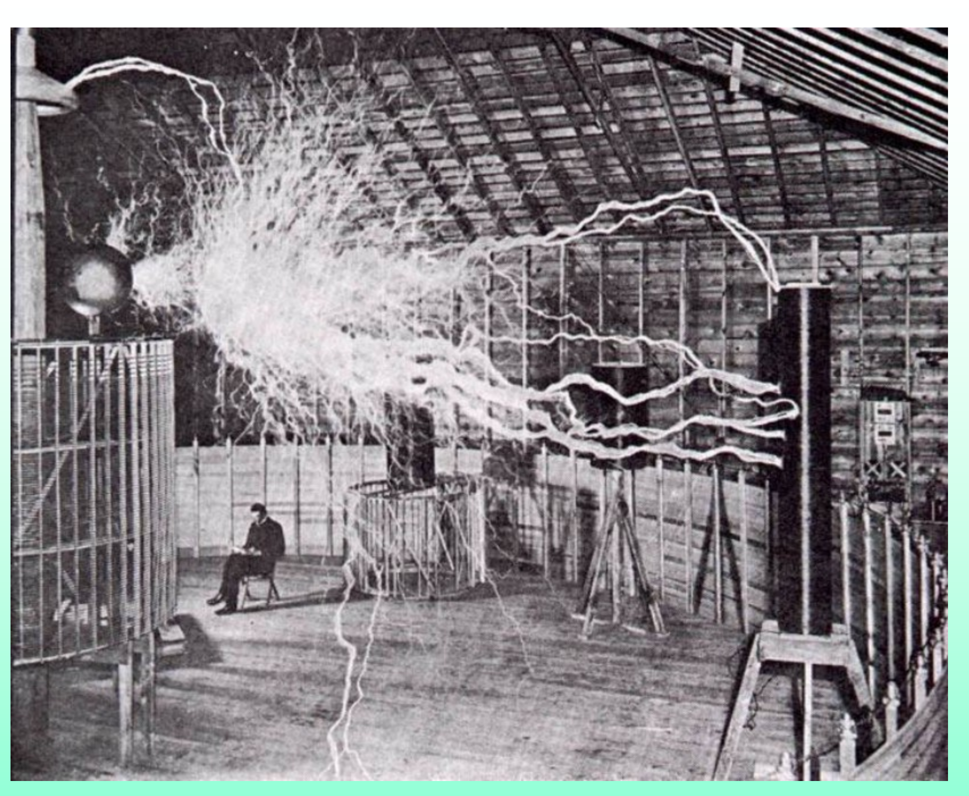
https://www.youtube.com/watch?v=NwaJ3BAaY1w

La biografia del mes
Nikola Tesla



(Smiljan, now Croatia, 1856 - New York, 1943) American physicist of Serbian origin. He studied at the universities of Graz (Austria) and Prague. After having worked in various electrical industries in Paris and Budapest, he moved to the United States (1884), where he worked under Thomas A. Edison, then a supporter of direct current electricity.

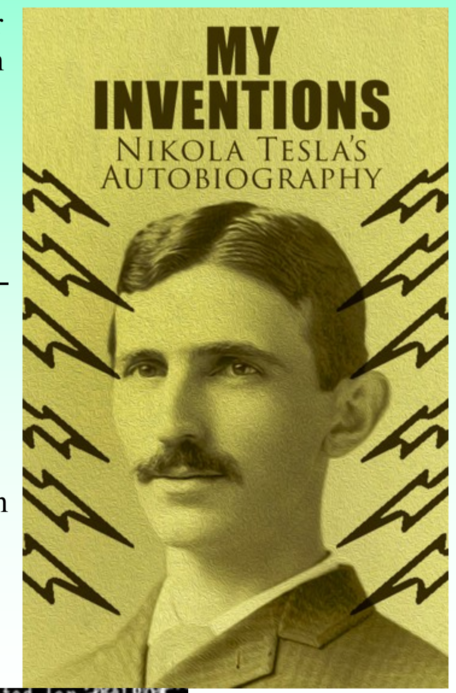
Nicholas Tesla
The incessant disputes with Edison forced his departure from the company and his association with George Westinghouse, who bought the patents for the motor from him and for a transformer that facilitated the distribution of this type of current to end users. Both won the battle of energy distribution, since alternating current transport is cheaper and simpler than direct current. In 1893 his system was adopted by the hydroelectric power station located at Niagara Falls.



Tesla founded an electrotechnical research laboratory in New York, where he discovered the principle of the rotating magnetic field and polyphase alternating current systems. He created the first alternating current induction electric motor and many other electrical devices such as the so-called Tesla mount, a radiofrequency transformer in which the primary and secondary are tuned, useful in preselecting the input of a radioelectric receiver. He predicted the possibility of wireless communications in

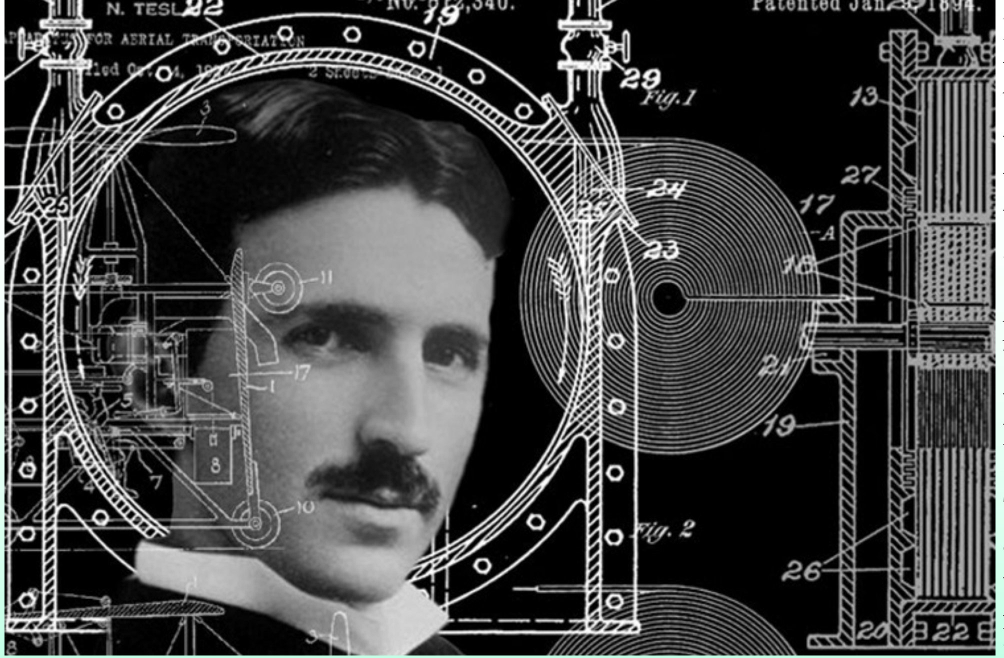


advance of the studies carried out by Marconi, and in his honor the unit of measurement of the intensity of the magnetic flux in the international system is called the tesla.



His inventions and patents followed each other with some speed. In 1887, and as a consequence of the discovery carried out by John Hopkinson in 1880, according to which three alternating currents out of phase with each other can be moved more easily than a normal alternating current, Tesla invented the triphasic current induction motor.

In this motor, the three phases act on the armature in such a way that it rotates when a rotating magnetic field is generated. However, the rotor moved with a certain delay with respect to the frequency of the current. Based on this invention, the Swedish Ernst Danielson created the synchronous motor in 1902, in which he replaced the material of the armature, which was not magnetic, with a permanent magnet or electromagnet, which allowed him to achieve a motor that rotated with a number of revolutions per minute equal to the frequency of the current.

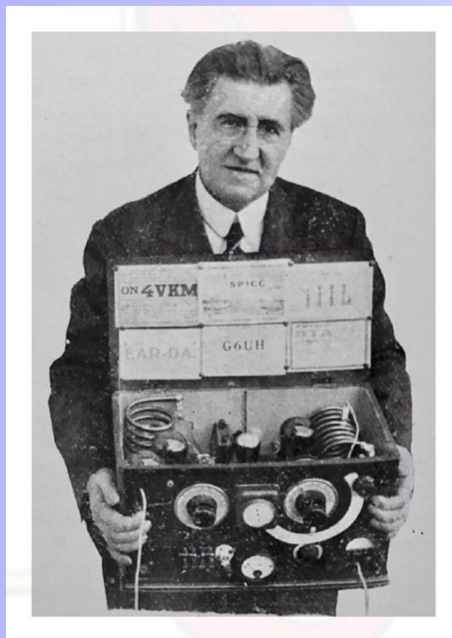


In 1891 Tesla invented the coil that bears his name, which consists of a transformer consisting of an air core and primary and secondary coils in parallel resonance. With this coil he was able to create a high voltage, high frequency field. Two years later he discovered the wave-like phenomenon called "Tesla light" in high-voltage, high-frequency alternating currents; By studying these currents, he observed that single-pole incandescent lamps emit light when brought close to a conductor through which electric current passes, and that empty glass tubes glow even without an electrode if they are connected by wires. one of its ends and the other approaches a conductor through which high-frequency current flows. He also realized that the human body is capable of conducting these high-frequency currents without harm.

Source: https://www.biografiasyvidas.com/biografia/t/tesla.htm

Ángel Muro Durán, EAR-TI (provisional), EAR-322, EA7BJ, EA-4AL (1906-1936), Second Chief of the Civil Guard Transmission Service. (part 2)

The broadcasts were also received in perfect conditions in Medina Sidonía (Cádiz), Utrera (Seville), Ayamonte (Huelva) and many points located more than 100 kilometers away, according to some spontaneous radio listeners. Muro managed to cover a radius of more than 70 kilometers with so little power that, had he used telegraphy, it would have lengthened considerably.
The Civil Guard lieutenant, Eduardo Comas Añino, praised, in the same publication, shortly after, the work of Ángel Muro in the field of wireless intercommunication.
The guard, F. González, from the Garciaz post (Cáceres) also exhorted the Corps to put Ángel Muro's project into practice, «The experience of sad and recent events has shown us the need to provide the Civil Guard with modern communication system that concerns us […]", he stated in a small article in the same magazine, in which he also commented on the radio telegraphy experiences that he was carrying out:
«[…] The encouragement I feel for the progress of usable advances in the Civil Guard service has induced me to study and practice radio communication; colleagues, enthusiastic, help me; between all of us we have built a wooden manipulator, a small buzzer, a battery with pocket flashlights, and organized the station, we rehearse with perseverance; the speed of transmission already reaches five words per minute among these fans.[…]».



Enrique Salgado de Azorín, EAR-268 (1933) Con su micro-estación portable. Boletín URE, nº 2, 28/2/1933, pág. IV

This civil guard ended by commenting that, in a future issue of the publication, he would explain how the manipulators were built and how the components of a modest station were established.
On July 10, 1934, Lieutenant Ángel Muro Durán, from the Cádiz Command and Head of the Sanlúcar de Barrameda Line, following orders from the Civil Guard General Inspector, left for Madrid on a commission related to the radio service of the Body.
On October 6, 1934, the Government of the Republic proclaimed a State of War throughout the national territory, signed by Alejandro Lerroux, then President of the Council of Ministers, as a result of the President of the Generalitat, Lluís Companys, proclaiming the " Estat Catalá" independent, inviting leftist republicans from all over Spain to establish a provisional government of the Republic in Barcelona; and also as a consequence of the social unrest in Asturias. The State of War lasted until April 13, 1935, the date on which it was lifted.
On October 11, 1934, Lieutenant Ángel Muro Durán went to Palencia following orders from the Inspector General of the Corps in order to take charge of a mobile radiotelegraph station and with it go to Oviedo to reestablish communication with the command of said Command that was interrupted. On the 12th, once he took charge of the mobile radio station, he went to León with the guards who made up its team, from where he continued towards Oviedo until he reached Campomanes, vanguard of the South-North Column that operated in the mining basin. From this point he was able to establish communication with the central command, facilitating the news that could be received from the Meritorious posts in the rebel zone. From that day on, Lieutenant Muro was at-

tached to the General Headquarters, providing the radio link service. On the 15th he was appointed by the General Chief of the aforementioned Column, Information Officer of the same. On the 19th, Ángel Muro advanced with the guards under his command and the mobile radio station located at the vanguard of the Column to Pola de Lena, and later to Ujo, where they spent the night. On the 20th, already overwhelmed by the column, Lieutenant Muro went to Mieres and Oviedo, from where he received orders to return with the team to Madrid, arriving in the capital the following day.

By Order communicated to the Inspector General of the Civil Guard, Celcilio Bedía Cavallería, by the Minister of the Interior, the radical, Eloy Vaquero Cantillo, on November 21, 1934, José Blanco Novo was appointed Chief of the Radiotelegraphic Service of the Civil Guard. . New rules on this Service were established in the aforementioned Order, which included the creation of the badge for the personnel of said specialty. On November 30, the Inspector General disseminated this provision, which was published days later in the Official Gazette of the Civil Guard with the following text:


Teniente Ángel Muro Durán (1932), obtuvo el indicativo de radioemisor aficionado EAR-322 en 1933 que en 1934 fue cambiando a EA7BJ en la nueva nomenclatura oficial.

"The Hon. Mr. Minister of the Interior, in Order communicated dated 21 of the present, tells me the following:

“H.E. Mr.: -The ministerial order of this Department, dated June 2, 1929, established the Radiotelegraphic Service in the Civil Guard, creating the current Network of Stations, which number 17 have been operating in the main provincial capitals. The Government agreed to expand this Service, and granted by law of July 7 of the current year, the necessary credit for the installation of Stations in all the Commanderies and the provision of mobile equipment, an expansion that at the end of the current year must remain carried out, this Ministry has seen fit to provide: 1) The Civil Guard Radiotelegraph Service will depend directly on the General Inspectorate of said Institute. Its fundamental mission is to establish communication between its Centers, Departments and Units; It may also be used by civil and military authorities, when circumstances so require. Likewise, it will provide due cooperation and assistance to similar services, land, sea and air, in the manner determined by International Agreements. 2) The Chief of this Service will be Captain D. José Blanco Novo, who will have Lieutenant D. Ángel Muro Durán under his command, to help him and substitute him in his case. 3) When the intervention of a technical official is required, for commissions, purchases, recognition of material, etc., the Engineer of the Institute's Mobile Park will carry out these functions. 4) The Head of the Service will be in charge of the organization and direction of the traffic and of the instruction of the Operations personnel. 5) These personnel will wear the badge of their specialty on the left sleeve, adjusted to the attached design. 6) By the General Inspection

of the Civil Guard will dictate the complementary instructions for the development of this order.»
What is made public for general knowledge. Madrid, November 30, 1934."
On February 15, 1935, he was appointed Inspector General of the Civil Guard, his second term at the head of the Institute being Division General Miguel Cabanellas Ferrer, who until then had held the position of Inspector General of Carabineros.
On February 25, 1935, Ángel Muro Durán was assigned to the Ciudad Real Command, definitively leaving Cádiz, where he had been serving until then.
Between March 8 and 13, 1935, Blanco Novo carried out the installation of four new radiotelegraph stations for the Civil Guard in the provincial capitals of Palencia, Lugo, León and Coruña, being assisted in said task by Lieutenant Ángel Muro Durán . The Lugo Station was left in charge of the Corps' member operators, Jaime Vázquez Fariñas and Manuel Neira Gómez, who had completed the corresponding training course in Madrid until they were declared fit to carry out this task.



Estación de radioaficionado de Ángel Muro Durán, en San Lúcar de Barrameda, cuando utilizaba el indicativo provisional, EAR-TI. Fotografía publicada en la Revista Técnica de la Guardia Civil de marzo de 1934. En la pared, encima del indicativo se puede ver un diploma que parece ser el que la asociación E.A.R. entregaba a sus socios al darse de alta.

Between March 22 and April 12, 1935, Captain Muro carried out the installations corresponding to Almería, Málaga and Jaén. On April 13 he traveled to Las Palmas de Gran Canaria and Santa Cruz de Tenerife with the same task.
On April 24, Blanco Novo carried out new radio telegraphic installations for the Corps in Córdoba, where he had the assistance of Ángel Muro since May 8, and in Granada.
In May 1935, José Blanco Novo was promoted to Commander and was given the Official Credential of the Order of the Republic, a distinction awarded to all those who had benefited the Republic and the Spanish people with their merits and personal works. in the exercise of their profession. Ángel Muro was also distinguished on May 22 with the delivery of the credential of Knight of the Order of the Republic.

To be continue

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Tomás Manuel Abeigón Vidal, EA1CIU
abeigont@gmail.com
Pontevedra



WE CELEBRATE MFJ ENTERPRISES INC.

¿Did you know that Mr. Martin F. Jue started his business in 1972, 50 years ago?
He decided to build a Morse code filter set for $9.95 and an SSB filter set for $12.95 using the new high tech op amps. He placed the first MFJ ad in Ham Radio Magazine. It was a tiny 2-inch by 2-inch ad and full of technical engineering jargon. If you read the ad today, you wouldn't even understand it, but he sold over 5,000 of those filters in a couple of years with those tiny ads.

After the announcement was posted, orders started pouring into her personal student mailbox. Martin rented a dilapidated hotel room in downtown Starkville for $16 a month, or 50 cents a day. It was a room that could not be rented to anyone else because the plumbing was not working and there was no furniture. I was in pretty sad shape. He was doing everything himself: engraving, drilling, filling and soldering the PC boards, taking the orders, shipping the orders, writing the ads, everything. After a few months, the hotel manager kicked him out. Martin was making too much noise and stinking up the place!
When he started selling assembled, wired and tested filters, he used to take these little bags of parts to the classes he was teaching and asked if any of his students wanted to assemble these filters for 25 cents a part. That . . . it was MFJ's first production line.
Today, MFJ Enterprises Inc. is one of the most famous manufacturers of HAM equipment in the world with more than 20,000 items in its catalog.

In order to celebrate its 50 years of activity in the field of amateur radio communication and if you are an MFJ enthusiast, we ask that you share with us the photos of your MFJ equipment (or sister companies) no matter if they are old or new ; We will be happy and proud to share it on the Official MFJ Telegram Channel //t.me/mfjenterprises.

Feel free to contact us and send your photos to ambassadoreuit@mfjenterprises.com
Be part of the great MFJ family from all over the world!

His name is Carlos Martinez YV4EGE from Barinas in Venezuela, the second winner on the Telegram Channel by MFJ Enterprises Inc.
Carlos was born on 11/24/1951 and received a mug with the MFJ logo for being the 500th subscriber of the official MFJ Telegram channel //t.me/mfjenterprises. Passionate about radio, married with 5 children, retired after years of service in the Venezuelan Air Force.
There are more cups up for grabs on the Telegram channel, so don't lose hope! The next could be you.
Remember that the first cup went to an Italian HAM, IW0FXN Paolo!

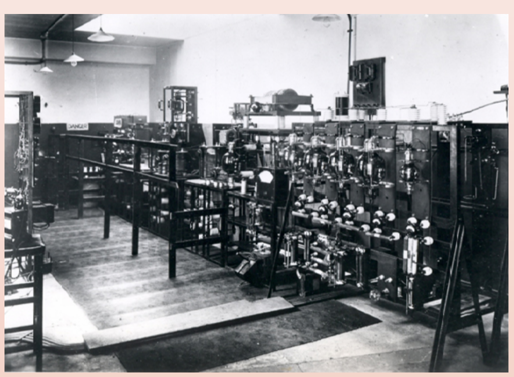


¡CELEBRANDO 100 AÑOS DE RADIODIFUSIÓN BRITÁNICA!

In 2022, the British Broadcasting Corporation will celebrate 100 years of broadcasting. The BBC's staff amateur radio club, The Ariel Radio Group, was established in 1945 and some form of amateur radio club has existed at the BBC ever since. The current outfit, London BBC Radio Group, has been given the callsign GB100BBC to help with the celebrations. GB100BBC will air from BBC Broadcasting House's main shack in central London, from other BBC facilities and QTHs in members' homes across the UK. We are indebted to Ofcom, the UK regulator, which has allowed the callsign to be used for the whole of 2022.

FIRST BBC STORY

The British Broadcasting Company (as it was then called) was founded on October 18, 1922 by a group of manufacturers of wireless devices. The Marconi Company was one of the group. A broadcast studio was built inside Marconi House on The Strand, London. The medium wave transmitter was housed in the same building, with antennas on the roof. The station was assigned the callsign 2LO.



The original 2LO transmitter. 22,500 volts went through the system! The power output was 1.5 kW at 820 kHz. (Image courtesy of the Science Museum)

At 5:33 p.m. on November 14, 1922, regular programming began, featuring a mix of news, music, drama, and talk. Initially, the shows were broadcast for only a few hours a day. By 1926 the transmission power had increased to 3 kW when an improved transmitter with antennas was installed on the roof of Selfridges department store in London. The studios were located on Savoy Hill. A number of regional transmitters were installed throughout the UK, carrying the same programming. The public was required to purchase a radio receiving licence, which cost ten shillings per year. That equates to around £60 in today's currency.

In 1927, Royal Charter established the British Broadcasting Corporation and appointed a Director General, Sir John Reith.

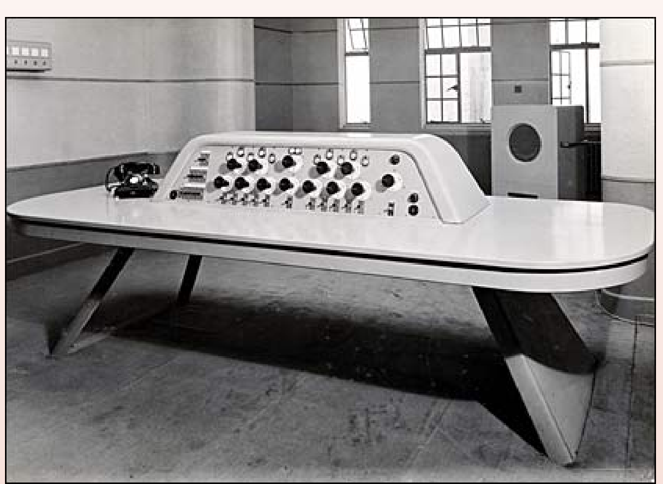
In November of the same year, Marconi used his Chelmsford base to do experimental Empire Broadcasts on 11750kHz using the callsign G5SW and with a power of 12kW. In 1930 King George V spoke to the entire British Empire from the House of Lords via the Chelmsford broadcast system and 9510 kHz was added.

By 1932 the BBC had outgrown the Savoy Hill studios and a purpose-built center was commissioned. Broadcasting House opened in May, with many architectural features created by the modernist designers of the day. The Empire Service was formally opened in December with programs of the new center.



London Broadcasting House in 1932, a presenter and sound mixing desk

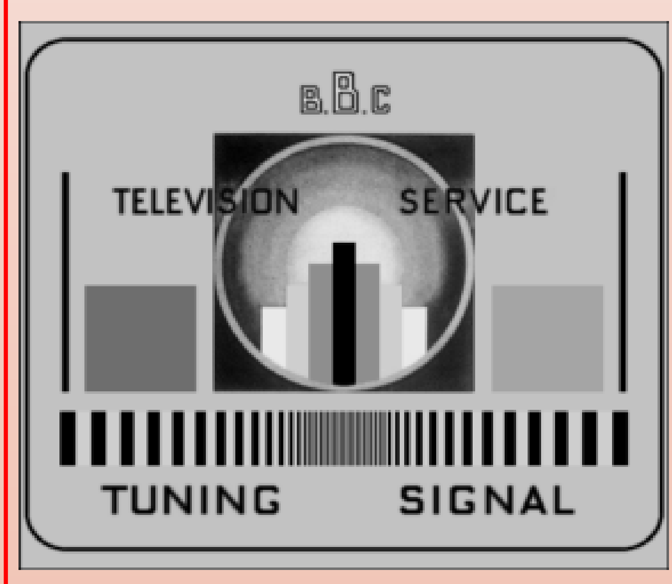
In November 1936, the BBC began its television service with studios and a transmitter located at Alexandra Palace, a high point in north London that looked down on much of the city. It didn't last long. On September 1, 1939, at the outbreak of war, it was closed without official explanation, but it has been speculated that the authorities were concerned that the strong broadcast signal could act as an aid to enemy aircraft. The last show seen was the Mickey Mouse gala premiere. When television returned in June 1946, the same Mickey Mouse show was the first thing on the air!



The BBC began foreign language radio broadcasting in January 1938 with a program in Arabic. Many more languages soon followed.

In 1941, the BBC External Services was moved to its own building, Bush House.

An early tuning signal that allows customers to fine-tune their receivers. (Image courtesy of meldrum.co.uk)



QSL INFORMATION

The BBC Radio Group team looks forward to working with you. We cannot issue a schedule of operations, but we hope you will find us using all bands and modes throughout 2022. A special commemorative QSL card will be available through the traditional office. We will send a card upon receipt of your incoming card. You can also QSL via Logbook Of The World and eQSL.

Please note that WE CANNOT QSL DIRECTLY UNDER ANY CIRCUMSTANCES.

Please do not send any cards to BBC Broadcasting House or individual participating club members, unfortunately you will not receive a reply. (QRZ.COM)



I AM A BAD RADIO AMATEUR

This is one of the conclusions I reach after listening to endless comments towards new operators, by some already established in amateur radio.

THEY HAVE GIVEN YOU THE INDICATIVE.

This is one of the statements that is heard very often on the radio, although, now by eliminating the different licenses and the feared CW for many, amateur radio has been able to open its doors.

I still remember when back in 1990 many colleagues were limited to obtaining the EB for which it was not necessary to operate in Morse and they were also branded as "less radio amateurs", or lower class.



RADIO IS NO LONGER MADE LIKE BEFORE.

I am surprised when looking for the definition of amateur radio in the RAE (Royal Academy of the Spanish Language) and it says: Person authorized to send and receive private radio messages using legally established frequency bands.



This definition lacks veracity since the messages in amateur radio must be public and without using any encryption.

I keep looking and I find that in Argentina they seem to have it a little clearer.

Duly authorized person who is interested in radio technology on an exclusively personal and non-profit basis, and who carries out training, intercommunication and technical study activities.

Something more complete and that defines us a little better.

I keep looking and I can't find any article, rule or law that requires using the phone or CW as the only communication system.



From what I deduce that, digital communications that in one way or another are made within the radio spectrum authorized for the holders of the relevant licenses are fully accepted and valid.

HAM RADIO IS DEAD

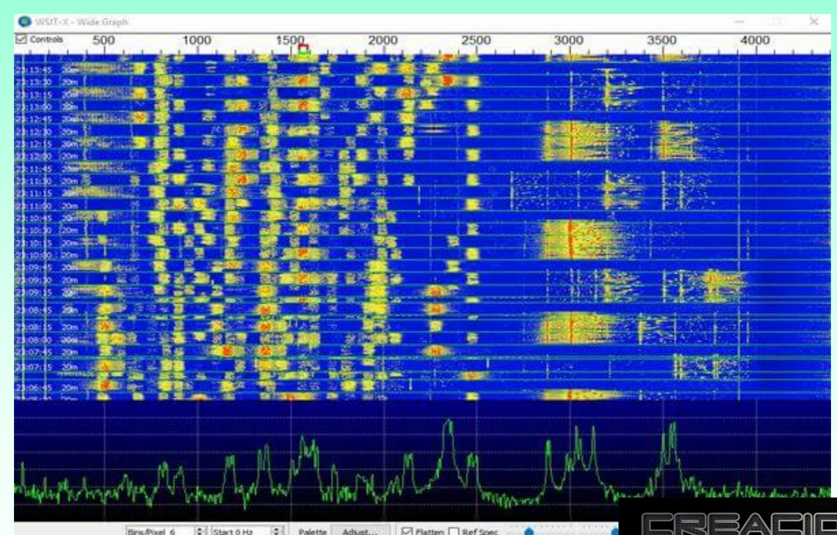
If as soon as you enter a forum, group, net, you hear this, don't be scared.

This is the tagline that many have for not wanting to evolve, amateur radio is like a living being, it evolves with the times and it is the people who make or will make amateur radio continue.

You cannot ask a young radio amateur to know how vacuum tubes work, as they will surelysince he has surely never seen equipment with these characteristics except in museums.

Surely this young man is more interested in interconnecting his equipment with his computer and thus being able to obtain





better results.
We must not let amateur radio die, many of the things that have excited us and that will continue to inspire our predecessors would die with it.

The magic of the first contact, the illusion to build your antenna, the most distant or curious contact, the radio friends..., and so endless things that would fall by the wayside.

THE FT8 IS IN FASHION.

Maybe it's a fad, like RTTY, PSK, or packet and other modes that we now consider obsolete.

Perhaps due to their peculiarity, these systems allow operators with limited conditions to enjoy their activity.

Maybe with less watts you go further.

Perhaps the qrm does not affect these types of communication so much.

Perhaps and I repeat perhaps this system brings us closer to youth who are more used to a keyboard than to a dial.

Or simply, maybe we have to be aware that evolution also reaches our hobby.

Amateur radio is more than just a hobby, it is a way of life in which the values obtained as a person are many.

Personal opinion of EA3IAZ



Working Satellite APRS with the Anytone AT-D578UV Plus

We are going to describe below our configuration of the Anytone AT-D578UV Plus equipment to work APRS in radio amateur satellites and the results obtained in our tests carried out with it practicing with the ISS.

In the first place, we will have to make a backup copy of our Code Plug that we will save and load in the equipment when we want to configure it again for terrestrial APRS. I suggest giving it the name of OUR INDICATIVE (APRS-LAND). This operation is necessary since we will have to modify and adapt the Code Plug regarding the APRS configuration to be able to work satellites and save it with another name, for example: OUR INDICATIVE (APRS-SAT). Perhaps the manufacturer wants to heed our suggestion to create the possibility of maintaining at least two configurations of APRS and that can be selected by the user according to their needs. This would avoid carrying out this operation of having to load the Code Plug for each use of APRS that requires changing its configuration.

After having made the backup with the terrestrial configuration, we are going to make the appropriate modifications for our purpose, that is, to work APRS on the radio amateur satellites.

In the following screens we see how this should look:

1) The first screen shows the APRS configuration in which we are going to make the following variations:

APRS Auto TX interval[s]: 60
Transmission frequency2[Mhz]: 145.825
Your SSID: -6
Fixed Location Beacon: "off" (with active GPS, in red) or "on" if we have it inactive or turned off (grey), in which case we must have the positioning data of our station filled in by hand for the beaconing to work and send our location).
APRS Map Icon: ` (Corresponds to the satellite dish icon)
Digipeater path: APRSAT,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1
Transmit Delay[ms]: 1200 (recommended)
Prewave Time[ms]: 1500 (recommended)



Enter your Sending Text: message that we want to transmit to the amateur community, in my case I have put «Vía ARISS Saludos Tomas Pontevedra».
Ana Aprs Tx: Wide
Transmit Power: Put the necessary value that we consider sufficient starting with the low, it is not necessary to riddle the satellite with high power.

2) The second screen shows the channel that we will have to create with the name APRS-SAT or the one that we want to identify for this use. The screen fields that we must configure are:

Receive Frequency: 145.825 Transmit Frequency: 145.825
Channel Type: A-Analog Band Width: 25k
APRS Report Type: Analog
Analog APRS Report Freq: 2 (Corresponds to the one we have indicated in the APRS configuration screen described above and which is 145.825). Finally APRS RX must be activated

Channel Information Edit---94
Channel Name: APRS-SAT
Receive Frequency: 145.82500
Transmit Frequency: 145.82500
Correct Frequency[Hz]: 0
Channel Type: A-Analog
Transmit Power: Turbo
Band Width: 25K
Busy Lock: Off
Scan List: None
APRS Report Type: Analog
Analog APRS PTT Mode: Start Of Transmission
Digital APRS PTT Mode: Off
Digital APRS Report Channel: 1
Exclude Channel From Roaming: Off
DMR MODE: Repeater
Analog APRS Report Freq: 2
PTT Prohibit / APRS RX / Talk Around(Simplex) / Work Alone / Auto Scan / DataACK Disable
Digital
Contact: Espana
Radio ID: EA1CIU
Color Code: 1
Slot: Slot1
Receive Group List: None
Digital Encryption: Off
AES Digital Encryption: Off
TX Interrupt: Off
Multiple key: Off
Random key: Off
SMS Forbid: Off
Send Talker Alias / Call Confirmation / Ranging / SMS Confirmation / BT Hands Free
Analog
CTCSS/DCS Decode: Off
CTCSS/DCS Encode: Off
Squelch Mode: Carrier
Optional Signal: Off
DTMF ID
2Tone ID
5Tone ID
PTT ID: Off
Scrambler Set: Off
Custom Scrambler: 2.6k
Compander / Reverse
2TONE Decode
Custom CTCSS: 251.1
R5toneBot: customize
R5ToneEot: customize
OK / Cancel / Previous / Next

After carrying out these two simple steps, we will have to create a zone called APRS or the name that we want to give it, in which we will put this channel and those that we create, if it is our wish to work APRS in different uses.

Next we will save the Code Plug with the name OUR INDICATIVE (APRS-SAT) and we will load it to the equipment. When it restarts, we will go to select the zone and the APRS-SAT channel within it.

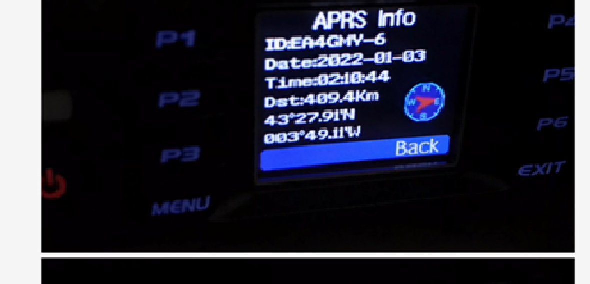
The APRS beacon will then begin to transmit every 60 seconds with the data that we have configured and when the satellite is in our range it will receive it and at the same time we will receive beacons from other colleagues through it. As an example, below are those of two colleagues that I have received at my station.

It is important to point out that if we do not have satellites in our range that pick up our beacon, it is absurd to have the sending activated every 60s, because it will not be picked up anywhere, so we can put the interval off waiting for it to be sent. bring the time of the pass closer to our QTH. There are satellite tracking programs such as SATSAT for IOS that allow



know when that will happen.

Finally, I reproduce screens of an Anytone AT-D878UV II PLUS walkie talkie and of the applications where the beacons that I have sent and that have been received and retransmitted by the ISS to the SATGATE stations are collected.



Amateur Radio Stations heard via ISS

This page documents Amateur Radio data digipeated by the International Space Station. In order to appear on this page, a position report in a valid APRS format must be digipeated through ISS, then be heard by an internet gateway station, which then forwards it on to the APRS Internet System. All APRSIS data is archived on this machine. Packets that came through the ISS are recalled for this display. For more info on the technology involved, see the links at the bottom of the page.

The system will also show those stations that have been heard via ISS but have not sent a position report in the table at the end of the page.

If you are able to transmit through the ISS digi and wish to send a packet that will make your position appear on these maps and those of APRS users of ARISS, see: http://www.aprs.org/iss-faq.html

The biggest weakness in the system right now is the lack of Internet Gateways, or IGates. Almost all APRS programs have the ability to function as IGates, consult the documentation of your program of choice for details...the more the better!

The current position of ISS, as well as the 5 and 10 minute future positions are also shown on the map.

Regrettabbly, because of the huge cost increase recently implemented by Google for its mapping service, google maps are no longer available.

SV3CIX	*	37.5245	22.86367	00:00:44:21
YO2DNO	*	45.77367	21.21817	00:00:45:42
SV2RR	*	40.98883	22.87	00:00:50:09
IK3ZGB-2	*	45.7125	11.7	00:00:51:37
IW2DMO	*	45.4055	9.6915	00:00:51:50
CT1EBQ	*	38.71267	-9.42283	00:00:52:40
EA1CIU-6	*	42.42683	-8.64017	00:00:53:05
PD0RLX	*	51.46667	3.53333	00:00:53:13
PE1NTN	*	52.49967	4.82383	00:00:54:47
PD5RT	*	52.1265	6.20883	00:00:54:49
G6UQZ-1	*	52.079	0.58183	00:00:55:54
K1WY	*	41.76233	-72.72567	00:01:06:01
K0KOC-1	*	39.3865	-77.41517	00:01:06:07
W3CJS	*	40.61117	-79.61983	00:01:06:08
VE2NGO	*	45.47117	-73.49317	00:01:06:08

```
00:00:52:51 : YO2DNO]T5TV42,NA1SS*,WIDE1-1,qAR,ON7EQ-10:`
00:00:52:57 : NA1SS]0P0PR9,APRSAT,qAR,ON7EQ-10:'v&l SI]AR
00:00:52:58 : IK3ZGB-2]CQ,NA1SS*,qAR,DG2HSI-1:=4542.75N/0
00:00:53:05 : EA1CIU-6]APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,A
Tomas Pontevedra
00:00:53:13 : PD0RLX]UQRXP0,NA1SS*,WIDE2-1,qAU,DO6DD-10:'
00:00:53:17 : YO2DNO]T5TV42,NA1SS*,WIDE1-1,qAR,ON7EQ-10:`
00:00:53:40 : CT1EBQ]CQ,NA1SS*,ARISS,APRSAT,PSAT,qAR,ON7E
00:00:53:49 : IK3ZGB-2]CQ,NA1SS*,qAR,ON7EQ-10:=4542.75N/0
00:00:53:53 : CT1EBQ]CQ,NA1SS*,ARISS,APRSAT,PSAT,qAR,ON7E
00:00:54:12 : CT1EBQ]CQ,NA1SS*,ARISS,APRSAT,PSAT,qAU,DH0F
00:00:54:15 : YO2DNO]T5TV42,NA1SS*,WIDE1-1,qAR,ON7EQ-10:`
00:00:54:42 : CT1EBQ]CQ,NA1SS*,ARISS,APRSAT,PSAT,qAU,DO6D
00:00:54:47 : PE1NTN]CQ,NA1SS*,qAR,DG2HSI-1:=5229.98N/004
00:00:54:49 : PD5RT]U2PWU9,NA1SS*,WIDE2-1,qAR,ON7EQ-10:'|
00:00:55:54 : G6UQZ-1]APDW16,NA1SS*,WIDE2-1,qAR,ON7EQ-10:
00:00:55:57 : NA1SS]0P0PR9,APRSAT,qAR,ON7EQ-10:'v&l SI]AR
00:00:56:01 : IK3ZGB-2]CQ,NA1SS*,qAR,ON7EQ-10:=4542.75N/0
00:00:56:15 : EA1CIU-6]APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,A
Tomas Pontevedra
00:00:58:57 : NA1SS]0P0PR9,APRSAT,qAR,LA3QMA-10:'v&l SI]A
00:01:06:01 : K1WY]TQTU7T,NA1SS*,RS0ISS,qAC,W1EME-6:'dGR1
00:01:06:07 : K0KOC-1]3Y2S1Y,NA1SS*,qAC,W1EME-6:'i4wl #/]
00:01:06:08 : W3CJS]CQ,NA1SS*,qAO,W1EME-6:=4036.67N/07937
00:01:06:08 : VE2NGO]T5RX2W,NA1SS*,qAO,W1EME-6:`e9Wl#Q`/]
00:01:06:47 : VE2NGO]APK004,NA1SS*,qAO,W1EME-6::W3CJS :Hi
00:01:06:58 : KA1O]T2TS0V,NA1SS*,qAR,N9SIR-1:`c7[1 -/`Nas
00:01:07:03 : K1WY]TQTU7T,NA1SS*,RS0ISS,qAR,N9SIR-1:'dGR1
00:01:07:09 : W3CJS]CQ,NA1SS*,qAR,N9SIR-1:=4036.67N/07937
00:01:07:13 : N1NCB-1]APOT21,NA1SS*,APRSAT,qAR,N9SIR-1:/0
00:01:07:24 : VE2NGO]T5RX2V,NA1SS*,qAR,N9SIR-1:`e9Xl"6`/]
00:01:07:29 : N3FCX-4]DJFT2Z,NA1SS*,qAR,N9SIR-1:'g.71 n/]
```

(Radio amateurs who have APRS receivers connected to the APRS-IS network via the internet and who upload to the system the beacons received by satellite emitted by them or by other radio amateurs who in turn retransmit the satellites as they pass and within range).

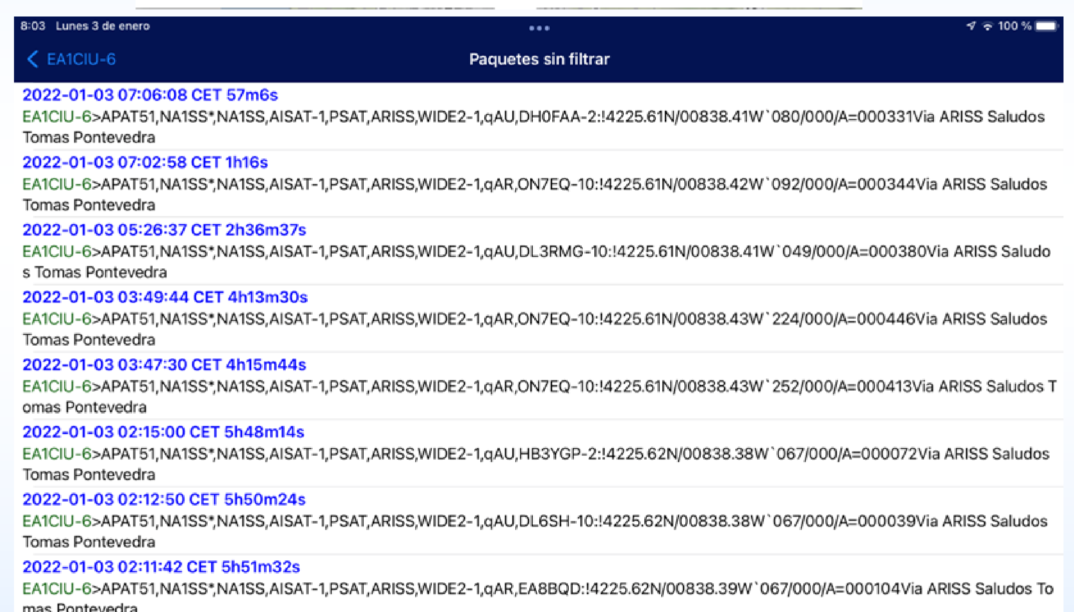
These beacons and ours can be seen on pages such as that of the ISS: http://www.ariss.net

I hope that this short article will help those who want to work with this sat-

ellite APRS equipment, which according to the tests I have carried out and here I reproduce, totally satisfactory in my opinion, allow you to also enjoy it in this activity.

Por: EA1CIU, Tomás Manuel Abeigón Vidal
abeigont@gmail.com
Pontevedra, 3 de enero de 2022





8:03 Lunes 3 de enero

EA1CIU-6 Paquetes sin filtrar

2022-01-03 07:06:08 CET 57m6s
EA1CIU-6>APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1,qAU,DH0FAA-2:!4225.61N/00838.41W`080/000/A=000331Via ARISS Saludos Tomas Pontevedra

2022-01-03 07:02:58 CET 1h16s
EA1CIU-6>APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1,qAR,ON7EQ-10:!4225.61N/00838.42W`092/000/A=000344Via ARISS Saludos Tomas Pontevedra

2022-01-03 05:26:37 CET 2h36m37s
EA1CIU-6>APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1,qAU,DL3RMG-10:!4225.61N/00838.41W`049/000/A=000380Via ARISS Saludos Tomas Pontevedra

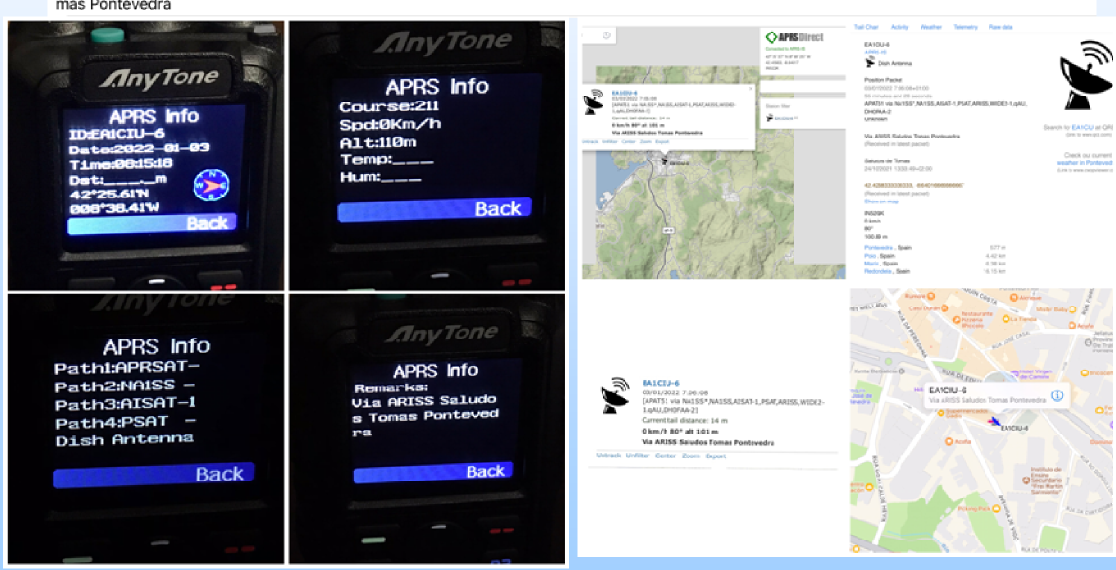
2022-01-03 03:49:44 CET 4h13m30s
EA1CIU-6>APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1,qAR,ON7EQ-10:!4225.61N/00838.43W`224/000/A=000446Via ARISS Saludos Tomas Pontevedra

2022-01-03 03:47:30 CET 4h15m44s
EA1CIU-6>APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1,qAR,ON7EQ-10:!4225.61N/00838.43W`252/000/A=000413Via ARISS Saludos Tomas Pontevedra

2022-01-03 02:15:00 CET 5h48m14s
EA1CIU-6>APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1,qAU,HB3YGP-2:!4225.62N/00838.38W`067/000/A=000072Via ARISS Saludos Tomas Pontevedra

2022-01-03 02:12:50 CET 5h50m24s
EA1CIU-6>APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1,qAU,DL6SH-10:!4225.62N/00838.38W`067/000/A=000039Via ARISS Saludos Tomas Pontevedra

2022-01-03 02:11:42 CET 5h51m32s
EA1CIU-6>APAT51,NA1SS*,NA1SS,AISAT-1,PSAT,ARISS,WIDE2-1,qAR,EA8BQD:!4225.62N/00838.39W`067/000/A=000104Via ARISS Saludos Tomas Pontevedra



Selvamar Noticias
NEW
* La revista del Radioaficionado

CONCURSO AL MEJOR DIPLOMA DEL AÑO 2021

We are pleased to inform all the friends of Radio, that LaRadioCb has received the award for the "Best diploma of the year 2021" from the hand of our colleague and friend Carlos, NAVEGANTE station.



The "Contest for the best Diploma of the year 2021" arises as an initiative of the NAVEGANTE station, QRA Carlos, on its Facebook page. This page was created by my friend Carlos to collect different issues related to amateur radio (especially CB-27 MHz) and the experiences that he accumulates and enjoys every day.
The proposal consisted of voting for the diplomas that Carlos liked the most of all those he had received throughout 2021. To do this, he had posted a previous selection on his wall in which, among others, was the diploma of the activity carried out by LaRadioCb in the "3rd Edition of Beer Day". And among all the diplomas posted, the followers of Carlos-NAVEGANTE who have voted, have seen fit to choose the 3rd Edition of Beer Day as the best diploma, a design made by our colleague and friend Ángel, QRZ Angeloso.
From what Carlos has told us, the vote has been very, very close and the result has been as follows:
First place: LaRadioCB with Beer Day.
Second place: CQ Breico Spain and 30-SC-26.
Third place: Cádiz Tacita de Plata.
Fourth Place: Parcelero and Pajarito Feliz.
Such a good initiative deserved to have a coffee and have a good time exchanging radio experiences, even if the damned virus doesn't let us do much. For this reason, in addition to sending us the award electronically, Carlos invited us to have a coffee in a cafeteria in Parla (the city where he lives) to present us with the physical diploma that LaRadioCB has achieved thanks to your participation.
From LaRadioCB, we want to thank Carlos-NAVEGANTE for such an original initiative and we hope it will be the first edition of many. We also want to thank all the participants, who throughout the year make an effort to think and organize new activities, spending their time and imagination in the design of spectacular diplomas and QSLs; that make us enjoy our passion for Radio, especially the CB-27 MHz.
We encourage you all to continue participating, organizing and carrying out radio activities, both as activators and as correspondents; or creating initiatives as original and fun as this one.
THANK YOU ALL AND VERY, VERY GOOD RADIO!!
By Manolo Meteorite
Source LaRadioCB

THANK YOU ALL AND VERY, VERY GOOD RADIO!!
Por Manolo Meteorito
From LaRadioCB



PROPAGATIÓN NVIS

In the American license exam syllabi, they are asked, for the General category (the majority among American radio amateurs), a couple of questions related to antennas and NVIS propagation. It is not a very publicized topic, I think, until one finds out what is going on. Here is what I have learned preparing for that exam in 2020.

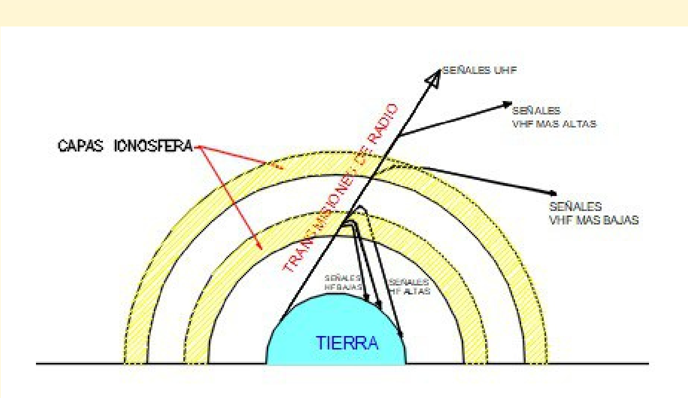
Near Vertical Incidence Skywave (NVIS)

Well, it is a radio operation technique that takes advantage of the ionospheric jump and directs the strongest signals from the station and vertically (or upwards) instead of towards the horizon. Nearly vertically propagating signals approach the ionosphere at steep angles of incidence and can bounce back to earth at equally small angles. The result of this operation is to achieve effective communications within a radius of a few hundred kilometers. This NVIS technique can help fill the gap left by communications that are in the local range of VHF repeaters or simplex communications and longer distance hopping with low horizon HF signal propagation.

The NVIS technique is based on a combination of factors including (but not limited to) the frequency used, the power of the transmissions, and the antenna configuration. Let's consider each of these three factors in the context of the NVIS technique.

Frequency

The reflection effects of the ionosphere vary with frequency. The reflection effect on signals decreases as the frequency increases. For this reason, for example, the 2 meter band (144 - 146 MHz) and higher frequencies are almost never received via hop propagation. HF bands from 10 meters (28 MHz) to 30 meters (10 MHz) are often successfully refracted towards the Earth's surface when directed towards the horizon, where the angles of incidence in the ionosphere are closer to the horizontal and this form of propagation achieves a great jump of distances of up to 3000 kms. However, and generally, returns to earth of these frequencies higher than HF are not achieved with the ionosphere for this type of NVIS technique.



"Bending effect of the ionosphere is greater for lower frequencies"

The reflection effect of the ionosphere is sufficient even at "near vertical" angles of incidence to send lower HF frequencies back to earth, particularly the 40 and 60 meter and even 80 meter bands. These bands are more suitable for NVIS, even during daylight hours, when further hop propagation in these bands is not effective due to D-layer absorption.

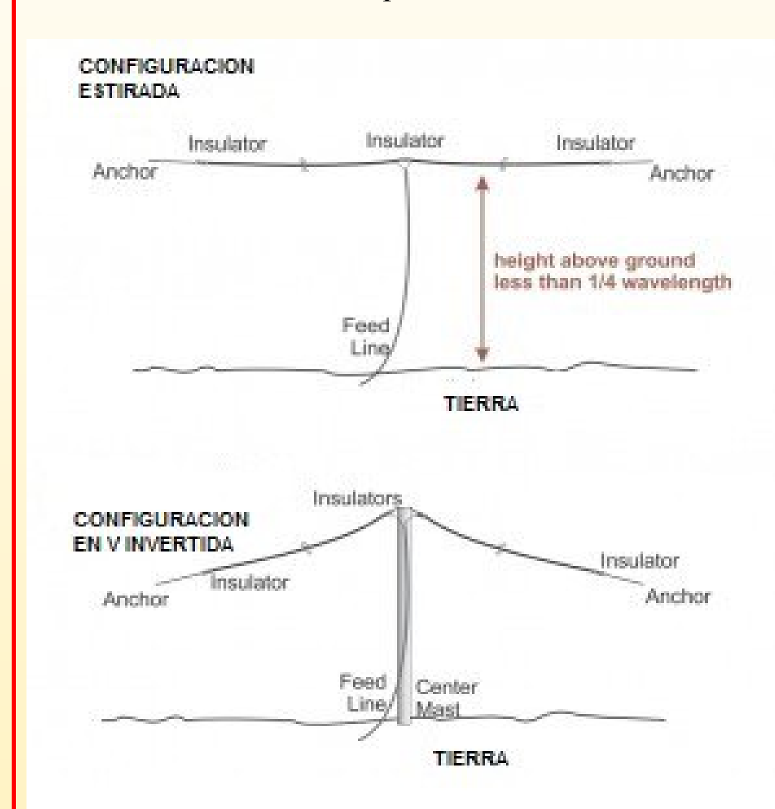
Potency of transmission

Not much transmission power is needed with the NVIS technique. A sufficiently effective NVIS communication can be achieved with the typical 100 watts of many HF transceivers. In good ionospheric conditions a lower power may be sufficient for effective QSOs. When atmospheric conditions are less favorable, increasing the transmit power with an RF power amplifier can help make NVIS communications more secure. It is more or less common for many NVIS operators to employ amplifiers in the high part of the day, when D-layer absorption most severely attenuates signals.

The D-layer of the ionosphere normally absorbs signals below the 30-meter band during daylight hours, so long-distance hopping is not effective in the lower bands. These bands open up for long-distance jumps at night when the D-layer dissipates and the F-layer reflects these frequencies. However, since NVIS signals travel through the D-layer at very steep angles, the transit distance through the layer is minimized compared to long hop signals traveling toward the horizon. As a result, D-layer absorption of NVIS signals is minimized and NVIS is often a viable technique during daylight hours, with performance variations for ionospheric conditions.

Antenna configuration

Perhaps the most critical factor, and certainly the most controversial in ham (?) discussions, is the antenna configuration for NVIS that produces the best signals directed upwards, ie vertically. Let's look at the basic concepts first and then the more complex ones.



NVIS propagation minimizes transit through the D-layer at steep angles"

A horizontal antenna provides the best NVIS propagation. A half wave dipole cut for the frequency of use is very effective and is also the most commonly used type of antenna for NVIS. Full wave horizontal antennas are also suitable. In the case of the half wave dipole a horizontal configuration or a slightly downward tilted inverted V configuration works well, but regardless of the specific type of antenna used and horizontally polarized the key factor in the configuration is the height of the antenna above the ground. I usually.

To direct most of the transmitted signal vertically, the antenna must be placed relatively low. The interaction of directly radiated signals with reflection from the ground results in a higher intensity of the radiated signal in the vertical direction when the dipole is much less than ½ wavelength above ground. The height is typically less than ¼ wavelength for the NVIS technique, and much lower heights are preferred by many operators due to improved performance. An even shorter height is often used. In the 40 meter band, a dipole raised just 4 meters above the ground can provide very effective NVIS propagation over a radius of several hundred kilometers. There is not much unanimous agreement on the height above ground for the best NVIS performance. Some work seems to point to better performance on 40 meters at a wavelength of 7 meters above the ground, and on 80 meters at a height of 13 meters. It's a matter of testing, as always. And more when it comes to the 80 m band.

Other factors

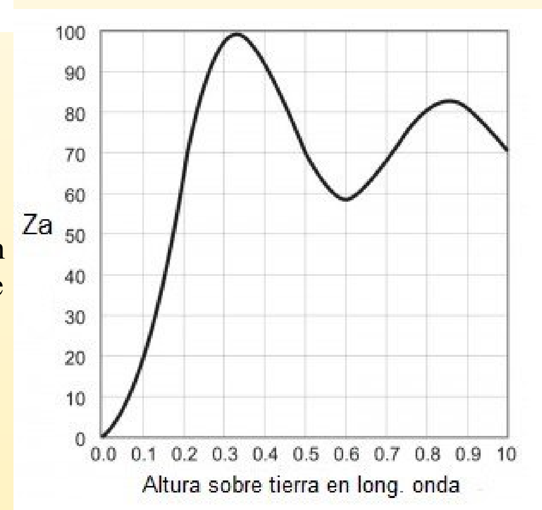
Aside from height, power, and frequency, there are other factors that will affect performance. Height above ground affects the impedance of the dipole feed point. As the dipole is lowered below ¼ wavelength, the feedpoint impedance will significantly reduce in value and the SWR may

increase. For best performance, adjust the dipole antenna to the height at which you want to use it. The conductivity of the ground will affect the performance: with the low conductivity of the rocky or sandy and dry ground the gain of the antenna is reduced. With a more conductive soil, such as soil rich in conductivity and moisture, the gain of the antenna will improve. This brings up another little agreed upon factor, the use of a parallel ground wire below the horizontal dipole element. This arrangement can be thought of as a "Two Element Directional Yagi", with the ground wire providing a "reflector" element.

Generally, a parasitic wire reflector is made 5% longer than the driven element or 5% longer than the half-wave dipole and placed below the driven element. The distance below the driven element is generally recommended as 0.15λ (wavelength), although other values are also recommended. Some say that this "reflector" cable rises a little above the ground. A bit messy the truth and, sometimes, complicated. Much. On top of that adding that cable reflector reduces the bandwidth a bit with very little effect in dB on other combinations. I already said, sometimes it is more complicated than it seems Overall, an extraordinary environment to experience. Who has room, of course. And more taking into account all other factors such as ground conductivity, height above ground, reflector element implementation and configuration, other RF coupling conductors in the vicinity, varying atmospheric conditions, transmitter power levels , the quality of the transceiver and feedline, the accuracy of signal strength measurements, and perhaps many other things can affect the measured performance of the NVIS antenna. So perhaps the best policy is to familiarize yourself with some of the theories of these factors, and then try a few things to see what seems to work best for your specific situation. Nothing easy and possible in most cases.



"Half-wave dipole antennas are great for NVIS, located a fraction of a wavelength above the ground.



"Graph of the influence of the antenna impedance with its height above the ground"

Summary of the antenna issue:
If you don't want to go crazy with the antenna thing, a horizontal cable placed a fraction of a wavelength above the ground will probably give you fairly decent radio communications via NVIS propagation paths.

Bibliography: WØSTU. NVIS spread. Translation and adaptation of EA1CN.

Diego Doncel. EA1CN.
ea1cn@hotmail.com

Selvamar Noticias
NEW
* La revista del Radioaficionado

Chile inscribe a su primera región en el programa SOTA (Summits On The Air) parte 2



Note: It comes from the article published in the number 20 of the month of October

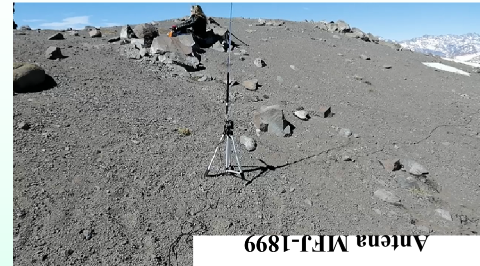


Altura y Coordenadas de la cumbre del San Gabriel

At last at the summit, we take a breather before proceeding with the activation.
Once at the summit and with a temperature of around 10 degrees or less, I unfold the MFJ-1899 antenna on the tripod, which allows it to always be vertical. Then I connect my FT-818 multiband radius of Yaesu, faithful in all my outputs to the high mountain and any climatic condition with a backup battery to get the juice at the power of a QRP team, which is not much, but knowing that not you can carry the full weight of a great power to these types of summits.
Accompanies me already worn handy a Wouxum KG-UV6D for activation on 2 meters.

Despliegue de equipos y activación

Fortunately, there is no strong wind and it is possible to raise the antenna without problems during the entire activation.
Activation makes sense when you start hearing everyone at a noise level that I would already want in my regular QTH. Hunters begin to appear on both bands at 40 and 2 meters.
Since it is a high mountain, the time spent on the summit is short between resting, preparing the equipment and the time for activation, it is that only those who were attentive to the frequency participate.



Antena MFJ-1899



Among them the following in UTC time:
Probably this time there have not been many QSOs for the reasons mentioned above and also because the low power is "covered" by the "shout" of teams of greater "tonnage" surrounding in the area. But I am satisfied to have fulfilled the mission that I set myself several days ago.
In the end, all the scheduled activity was confirmed according to the publication

ESTEBAN	CE3LVA	146.260MHz	FM	15:16
HUGO	CE3BBC	146.260MHz	FM	15:22
FRANCISCO	CE3FEI	146.260MHz	FM	15:25
EGON	CE6CTL	7.133MHz	SSB	15:33
OMAR	CE3OPJ	146.260MHz	FM	15:39
PATRICIO	CE3PFS	146.260MHz	FM	15:44

QSO confirmados



Radio Adventures - The Magic Box

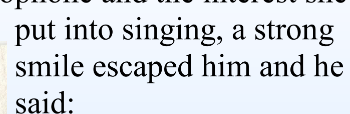
When Manel was two years old, he saw how his mother, through a box full of buttons, lights, numbers and letters plus a small box with holes – which the mother called him a microphone – with a cord attached to the box of buttons, spoke with other people, sometimes in the midst of strange noises but by touching those mysterious buttons, those who were chatting were understood.



By the way, they didn't speak Catalan, they spoke in other languages that Manel didn't understand at all and that sometimes sounded like spy letters, Zulu, QSL, Mike, QSO, Charlie.

And on the other hand, he didn't see how there could be so many people inside that box that his mother said was magical and that it really was a radio station. It was to go crazy.

Piqued by curiosity, feeling and asking mom, he got to know and say "CQ, CQ .. is anyone listening?". One day when his mother stopped attending the station for a moment, Manel took the microphone and began to sing a song; "Juan, little boy, when he dances..." When his mother returned, he saw with what grace and drive her son took the microphone and the interest she



put into singing, a strong smile escaped him and he said:



This is not to sing, it is to talk to other people, as you have seen mom many times, when you are older mom will teach you to use the microphone, to start and stop the station, to understand all the little lights and numbers that you can see.

The next day, when Manel went to school accompanied by his father,Told him;

"Dad, you know that mom has a Magic Box with buttons and many numbers, and a microphone with which she talks and feels other people from many places", and her father replied;

"That's right son, I know, what your mother has is a station and it is used to communicate with the whole world"

How the Christmas parties were very close with their wonderful day of kings, Manel - it was very naughty - let go of dad: "I'll ask mom to let me talk and listen to the Magi of the East and I can ask for the toys directly to them and thus I will be sure that they will receive my requests and I will not have to write any letter, that these can be lost" And the father answe-red him;

"Yes son, you can do it, because your mother has a magic box with a microphone, buttons, numbers and lights"



That night, Manel fell asleep quickly with a big and happy smile

MORAL:
You can not put doors to the field, or limit the illusion of children. They decide what they want and we are just their companions

Author: Carmen Molina (EA3FPG)
Illustrations: Josep M. Hontangas (EA3FJX)
Correction: Juan Gendra



Challenge achieved

Por Carlos Almirón LU7DSY especial para Revista Selvamar Noticias.

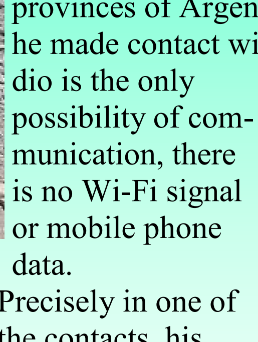
Diego Lizarraga LU9MZO, 38 years old, physical education teacher, mountaineer and radio amateur, current SOTA world champion in high altitude transmission on HF, after excellent preparation in the last three months, which included a new absolute record and surpassing it 15 days later , entered the Aconcagua park last Monday, January 2, in the Argentine province of Mendoza.


Image climbing the Aconcagua

He did it with the dream of reaching the summit of the colossus of 6961 meters above sea level, the highest on Earth after the Himalayan system in Asia, the highest peak in America, to transmit from almost seven thousand meters high for the first time in HF in the 40 meter band in SSB mode.

The first leg took him to Confluencia at 3,400 masl where he pitched his tent and spent the first night. The next day he reached the Plaza de Mulas base camp at 43,000 masl. along the normal route, with large rocks that protect the tent site. It is the place where the necessary acclimatization is carried out in order to continue climbing.

From there he made the first transmission on 7200 MHz on the phone, registering 15 contacts with 6 Argentine provinces.


Base camp Plaza de Mulas 4300 masl

He worsened the weather and a strong snowstorm covered part of the camp. There he slept for the last time on Friday the 7th.

The next day, Saturday 8 very early, still snowing, he went up to the Nido de Cóndores camp at 5400 meters above sea level. When he arrived, the weather had already improved and he took advantage of midday to start the 40 meter SSB in good spirits, after having spent a very cold night. It remained operational for more than an hour, totaling 36 QSOs with 7 provinces of Argentina and Chile. On VHF on 146520 MHz he made contact with Valparaiso, Chile. At that point, the radio is the only possibility of communication, there is no Wi-Fi signal or mobile phone data.


First snowfall in plaza de mulas.

Precisely in one of the contacts, his colleague from SOTA Argentina, Alejandro Weber LU1MAW, climate support from the city of Mendoza, provided him with very good news. The latest meteorological projection for the high mountains indicated a window of good



moisturizing with a mate

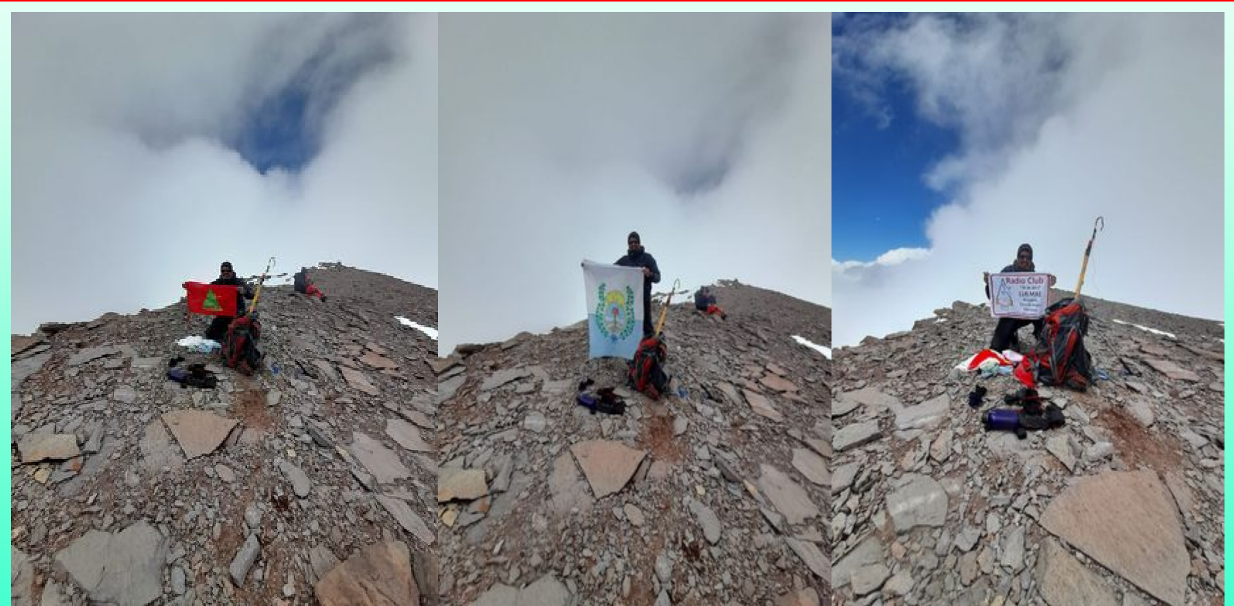
weather from Saturday afternoon to Monday afternoon, which would begin to worsen conditions.
On Sunday the 9th before nightfall he reached the Cholera high altitude camp at 6000 meters above sea level. where early he was already resting, because on Monday the 10th at 4 in the morning (7 UTC), still at night, he began the last effort to climb the 1,000 meters that separated him from the top.
At 13:00 LU (16:00 UTC) the historic moment occurred, when he reached the summit. With great emotion he knelt down and for two minutes he only managed to cry. At 13:07 LU (16:07 UTC) a shout was heard: CUMBREEEEEE, it was Diego with his backpack already prepared as a field radio station with his LU9MZO/M license on HF on SSB on 40 meters on 7200 MHz, on 146520 MHz on VHF and 432500 on UHF, using an inverted V dipole antenna with a 5.5 meter fishing rod mast and Xiegu X1M rig, a gift from his radio godfather José Moharraui LU5MDT, which he premiered on Aconcagua, with a battery of 5 w lithium, and handys for VHF and UHF.. Enthusiastic Chilean colleagues from the Los Andes CB2R activations group responded immediately. One of the first contacts from Argentina, at 16:12 UTC, was with Horacio Bollati LU1MHC, who was his instructor at the Cuyo Radio Club when he took the amateur radio entrance course, and for whom he has a special appreciation.

Broadcasting from the Nido de Cóndores camp



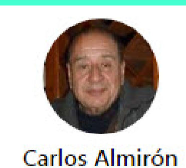
towards the summit

In the midst of a tremendous, messy and unexpected pile up, he prolonged the activity for 90 minutes, when he decided, given the time and the beginning of another snowfall, to start the descent, leaving his name in SOTA history. The final log indicated a total of 64 QSOs, 33 on VHF, 16 on UHF and 15 on HF.
When he arrived at the Plaza Cólera shelter, a thousand meters below, around 7:00 p.m., where he spent the night, 20 centimeters of snow had already accumulated in the tent.
The next morning, still snowing, he with great effort descended to 4,300 meters to the Plaza de Mulas base camp.
On Wednesday, January 12, when night fell, he finished going down, being awaited at the entran-



At the summit with the flags: SOTA, Province of Mendoza and Radio Club Rivadavia

ce of Aconcagua Park (the same place where he had entered on January 2), by relatives and friends.
They were 10 intense, unforgettable days, with strong emotions, having fulfilled a dream that he kept in his head for a long time.
Effort, commitment, tenacity and conviction made it possible again... In 2018 Diego as a mountaineer, on his first summit he could only be on the top for five minutes due to the intense cold.
Diego Lizarraga from Rivadavia, Mendoza, one of the best in the world of the SOTA program, is an authentic pride of LU and a benchmark for the new generation of Argentine radio amateurs.
A media report now where Diego LU9MZO tells all the details can be heard at https://youtu.be/h7Iuv-yI7p8



Carlos Almirón



Efectuados Exámenes Ministeriales para Radioaficionados

After two years of stagnation in the growth of Cuban Amateur Radio, motivated by the Covid-19 pandemic that affected this important indicator of radio activity, it continues to arouse the interest of not a few, for joining this useful entertainment that shows its benefits. , facing the technological development that characterizes the current world.

In Cuba, convinced of the acceptance that restarting the return to membership growth would have, emerging preparation programs were developed, including the Virtual Amateur Radio Academy and other local initiatives, which encouraged the authorized authorities to issue a call for exams, the which took place on January 22 with good results throughout the country.

RESUMEN ESTADÍSTICO DE LOS EXÁMENES MINISTERIALES DEL 22 DE ENERO DE 2022

Filial FRC	Presentados por Categoría				Aprobados por Categoría				Desaprobados Por Categoría			
	1ra.	2da.	3ra.	Total	1ra.	2da.	3ra.	Total	1ra.	2da.	3ra.	Total
Pinar del Río	1	2	3	6	1	2	3	6	0	0	0	0
Artemisa	0	1	5	6	0	1	5	6	0	0	0	0
Mayabeque	0	3	12	15	0	3	12	15	0	0	0	0
La Habana	12	22	9	43	12	22	9	43	0	0	0	0
Matanzas	3	5	9	17	3	5	9	17	0	0	0	0
Cienfuegos	0	3	1	4	0	3	1	4	0	0	0	0
Villa Clara	3	11	9	23	3	4	8	15	0	7	1	8
Sancti Spiritus	2	2	3	7	2	2	3	7	0	0	0	0
Ciego de Ávila	6	10	4	20	4	8	4	16	2	2	0	4
Camagüey	8	10	4	22	8	10	4	22	0	0	0	0
Las Tunas	4	1	7	12	4	1	7	12	0	0	0	0
Holguín	3	5	13	21	3	5	13	21	0	0	0	0
Granma	0	0	4	4	0	0	4	4	0	0	0	0
Stgo. de Cuba	16	19	15	50	16	19	15	50	0	0	0	0
Guantánamo	1	4	3	8	1	4	3	8	0	0	0	0
Isla de la Juv.	0	3	0	3	0	3	0	3	0	0	0	0
Total	59	101	101	261	57	92	100	249	2	9	1	12

261 radio amateurs were presented, of them 100, aspired to the 3rd. Category and 149 did it to improve their privileges, according to current legislation. The promotion achieved was 95.40 percent, whose result highlights the applicants who only failed their exam.

The FRC affiliates that added the largest number of submitted and approved were Santiago de Cuba with 50 and Havana with 43.

In this way, this awakening in Cuban amateur radio is produced, whose follow-up could not be other than the technical improvement of the associates and the increase in radio activities that will undoubtedly increase every day.



Cuban radio amateur groups receive, at the beginning of 2022, a strong impulse to multiply their radio presence in all Bands and Modes and constitutes the response that the IARU expects from its Member Societies, Cuba among them.



I am accompanying you with the statistical analysis and some images taken during the ministerial exams on January 22, 2022.

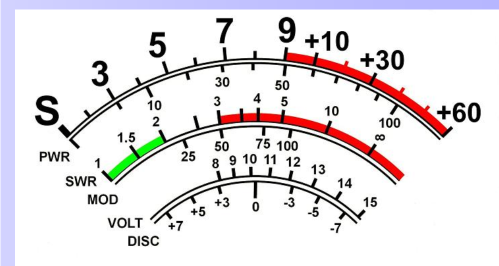
Joel Carrazana Valdes (CO6JC)
FRC Information System



El S-meter, como interpretarlo

Smeter is the unit meter S.
The unit S is related to the change in power of the signals and corresponds to four times the power of the signals at the input of a receiver, so that between S1-S9 there should be a theoretical 6 dB difference.
You have to consider that:
a) At frequencies below 30 MHz, an S9 reading with 50 uV at the receiver input would correspond.

Nivel de señal	Intensidad relativa	Voltaje recibido		Potencia recibida (Z_c = 50 Ohm)	
S1	-48 dB	0.20 uV	-14 dBuV	790 aW	-121 dBm
S2	-42 dB	0.40 uV	-8 dBuV	3.2 fW	-115 dBm
S3	-36 dB	0.79 uV	-2 dBuV	13 fW	-109 dBm
S4	-30 dB	1.6 uV	4 dBuV	50 fW	-103 dBm
S5	-24 dB	3.2 uV	10 dBuV	200 fW	-97 dBm
S6	-18 dB	6.3 uV	16 dBuV	790 fW	-91 dBm
S7	-12 dB	13 uV	22 dBuV	3.2 pW	-85 dBm
S8	-6 dB	25 uV	28 dBuV	13 pW	-79 dBm
S9	0 dB	**50 uV**	34 dBuV	50 pW	-73 dBm
S9+10	10 dB	160 uV	44 dBuV	500 pW	-63 dBm
S9+20	20 dB	500 uV	54 dBuV	5.0 nW	-53 dBm
S9+30	30 dB	1.6 mV	64 dBuV	50 nW	-43 dBm
S9+40	40 dB	5.0 mV	74 dBuV	500 nW	-33 dBm
S9+50	50 dB	16 mV	84 dBuV	5.0 uW	-23 dBm
S9+60	60 dB	50 mV	94 dBuV	50 uW	-13 dBm





b) At frequencies above 30 MHz, an S9 reading with 5 uV at the receiver input would correspond.

In this way, with a radiofrequency antenna power of 75W emitted with the transmitter together with an isotropic antenna and the correspondent receives us with a stable S6 signal, we could increase the emission power by 25W to ensure that the correspondent receives us with a stable signal. from S7.

Nivel de señal	Intensidad relativa	Voltaje recibido		Potencia recibida (Z_c = 50 Ohm)	
S1	-48 dB	20 nV	-34 dBuV	7.9 aW	-141 dBm
S2	-42 dB	40 nV	-28 dBuV	32 aW	-135 dBm
S3	-36 dB	79 nV	-22 dBuV	130 aW	-129 dBm
S4	-30 dB	160 nV	-16 dBuV	500 aW	-123 dBm
S5	-24 dB	320 nV	-10 dBuV	2.0 fW	-117 dBm
S6	-18 dB	630 nV	-4 dBuV	7.9 fW	-111 dBm
S7	-12 dB	1.3 uV	2 dBuV	32 fW	-105 dBm
S8	-6 dB	2.5 uV	8 dBuV	130 fW	-99 dBm
S9	0 dB	**5.0 uV**	14 dBuV	500 fW	-93 dBm
S9+10	10 dB	16 uV	24 dBuV	5.0 pW	-83 dBm
S9+20	20 dB	50 uV	34 dBuV	50 pW	-73 dBm
S9+30	30 dB	160 uV	44 dBuV	500 pW	-63 dBm
S9+40	40 dB	500 uV	54 dBuV	5.0 nW	-53 dBm
S9+50	50 dB	1.6 mV	64 dBuV	50 nW	-43 dBm
S9+60	60 dB	5.0 mV	74 dBuV	500 nW	-33 dBm



My humble opinion (Albert F8FPW)



I got to know about Spain its sun, its folklore with its windmills and its culinary specialities. And for our activities, I had regretted that I didn't know earlier that EA6YG left too soon in the paradise of SK, his artworks and his achievements. For those who do not know:
https://www.morseexpress.com/lta/



Production has stopped, too bad. On the other hand, we can always hope to find an opportunity one day.
I still believe in Santa Claus even when I contacted him in the 20m and 40m in December with the station EA4-P apa N oel
isn't that a test?
However, we should not despair.

In a previous edition I told you about my trip in September to the radio amateurs' hall in Ávila, a beautiful medieval town located about 100 kilometers from Madrid.
There I had met some graphic friends and among them, Alberto EA4DD-EA4GKY.
Can we say that this young man took over from EA6YG?
In any case it looks like it!





An OM
serving
the OM is how he likes to present himself.
Among his achievements, spikes, Iambic, in the dimensions we know but also in portable versions.
He also practices the restoration of oldies that the lucky OMs find in flea markets or attics and who only ask "pouit-pouit-pouitar". (it's the "V", don't look, it's mine but if you know a more appropriate verb, I'll take you). Again after a good cleaning and I will finish by specifying that he also makes radio accessories.



Vibroplex Bug Original Deluxe 1960
Antes



Vibroplex Bug Original Deluxe 1960
Despues



One more, some will say, except that in this niche it seems to me that there are not many real manufacturers. We still find it in Europe or across the Atlantic but with exaggerated tariff claims not to mention exorbitant taxes and customs duties or in South East Asia but sorry, in terms of quality it is perfectible (polite term).
In this record, like all the others, he had bought a Uni-730A to learn. That's good, but in terms of settings, it's easy, there aren't any!!! On the other hand, at the clip-board level, it is at the top.
Therefore, my post today aims to introduce you to a wiser alternative but one that has nothing to envy to some heavyweights in the sector because Alberto deserves to be known and the success that he finds beyond the Pyrenees is, moreover, an example of it. .



I have attached some pictures of the models of it, but for a more complete description, take a look at his site http://www.alberkeys.com/
They all have in common that they are handmade, adjustable without special tools and built with neodymium magnets. Finally, they are customiza-ble in terms of the color of the palettes… or even the wishes of future buyers.

Adesias
Albert F8FPW



Medal in the name of ET Krenkel

For outstanding worldwide contribution to the development of radio amateurs

The Medal is awarded to natural and legal persons for their outstanding global contribution to the amateur radio movement in the following categories:

Natural persons: Noted radio amateurs, polar and marine radio operators, inventors, designers and engineers; DX-man; Competition men, HF and VHF activists, DIGITAL activists, expeditioners: organizers and participants of amateur radio expeditions on islands, polar and in rarely accessible coun-


KRENKEL MEDAL COMMITTEE

ERNST KRENKEL
1903-1971
Soviet polar explorer, professional radio operator, participant of the first Soviet drifting station «North Pole-1»

CERTIFICATE

№ 150

granted to

OT4A
Theo Bemelmans

In accordance with decision of Award Committee of the National Academy of Researches and Discoveries «Russian Traveler» is awarded with the E.T. Krenkel Medal for Outstanding global contribution to Amateur radio movement

12.02.2021

www.krenkelmedal.org
www.russian-traveler.ru

Vladivostok, Russian Federation



tries and territories of the world; cosmonauts and astronauts.

Legal entities: commercial and public organizations, research and production organizations, museums, clubs and federations, associations and foundations,



educational institutions, club radio stations, mass media (in particular, magazines, newspapers, television, television stations, radio channels, web portals).).

More info:
http://krenkelmedal.org/index.php?id=1#two





My name is Galenín Grúpez, and I am a Galena Diode… What is that?
I am a very small thing that radio devices have inside that are used to detect the signals that are in the air, and also, I am the first type of detectors that existed, since I have been serving for more than a century so that people can listen to the radio at home.
But in addition, here you can learn to be a true lover of radio waves, and I put at your disposal a lot of articles with which you can learn to get by between codes and devices.
You are ready? Well let's start!

the radio station

In this article I will talk about the radio station, that place where we radio amateurs go to talk to the rest of the world.
Well, let's start from the fact that we need 3 things: A transmitter, an antenna and a feeder.

The station

Or transceiver, since it is a device that emits and transmits, therefore the correct name would be this other. Although well, almost everyone calls it a station without more...
What I was telling you is a device capable of transforming our voice, the beeps of Morse code or what we write on the computer into electromagnetic waves. But it also does the opposite, it transforms these waves into something we can understand.
To be able to launch or receive these waves into the air, it is necessary…

The antenna

Which is usually something metallic, either a cable or aluminum bars, and will serve as a device to be able to listen and talk on the radio. There are many types, for example, the simplest ones are called half-wave dipoles, and they are simply two wires. But there are more complicated ones, such as Yagi antennas, which are the dipole of before but made of aluminum bars, but also have other bars that make the waves point to a certain place and make them come out with more force.
We could also talk about other well-known ones, the vertical ones. They're like string dipoles, but made of aluminum bars, and instead of being horizontal, they're pointing skyward. The latter are very common, since they are usually the easiest to install in apartment blocks.

feeding

For a station to work, it needs electricity, and we give it to it through a power supply, which are basically of two types:
– Direct current sources. They are devices that we connect to the socket at home and adapt the electricity to one with which the station can work. Some base stations already have this source inside, therefore it would be necessary to plug them in directly. But beware, only some, the largest.



Grupo
RADIO GALENA EA1RCG
Asturias

By the way, one type of power supply is the one we use to charge the mobile.
– Batteries. Like the cell phones. There are stations that have it inside, such as walkis, and other times we take them from other places, such as cars, since most stations can be connected directly to the car without lack of source.
Here I leave you the photograph of my radio station, and as you can see, I have a power supply connected to the plug in my house, then, from the source two cables come out, one red and one black that go directly to the station, and from it, another thicker cable comes out that joins it with the antenna.
station types
Now I will talk about the different types of stations that there are, and the first one is the one in the photo above, a



fixed station. We do not move this type of station (normally) from one place to another, and we have the antenna attached to the roof of the house, in the garden...
Another type of station is called portable or portable, and in it the antenna, the power supply and the station itself go together and it is possible to take it from one place to another. The simplest example is a Walki, but sometimes we go out into the field with a transmitter, batteries and antennas, and we also say that it is a portable station, since we go somewhere, we set it up to talk, and when we finish, we turn it back on. save.
And the last type of station is called mobile. We call it that because we carry it in the car, or in the truck, and to power the station we plug it directly into the car, without a lack of power. Normally the antenna of the mobile stations are usually on the roof of the vehicle itself and are usually flexible to be able to walk in the car and not break.
Other things that are on the radio stations
So far I have told you the minimum that a station has to have, but sometimes, it is not enough. Other things we usually have are:
– Computer. Since with it we can have the log book (Where we write down who we talk to) in electronic format, send QSL cards over the internet or connect it directly to the station and talk through it as a chat (Digital modes).
– Coupler. This device is used to adjust the antenna, since sometimes it is not possible to broadcast as is. We need to adapt the station to the antenna using this device. Ideally, you don't have to use it.
– Amplifier. It serves to give more power to the waves that the station manufactures. But beware, we will not be able to broadcast with all the power we want, since depending on the band we use, they leave us more or less watts.
To be continue …

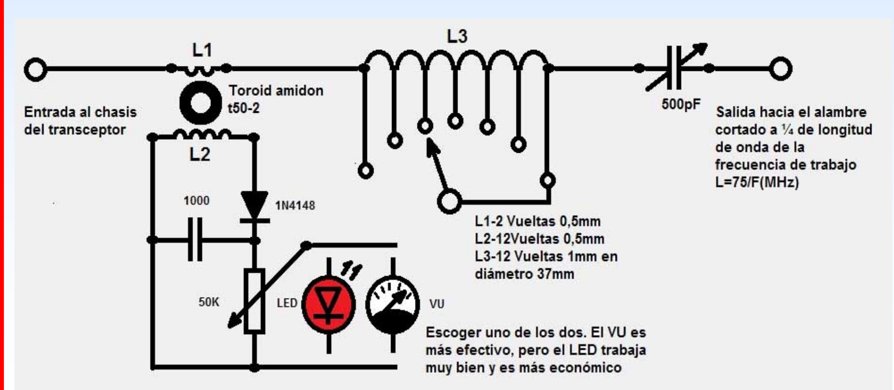
Mas info: http://www.galenin.radiogalena.es/



Experimente con la contra antena

The Federation of Radio Amateurs of Cuba (FRC) shares today with the readers of Selvamar Noticias, a technical experimental work developed by Yoelis Laurencio Molina (CO8TDL), Technical Secretary of the eastern branch of the province of Holguín.

Today we share with all radio experimenters a proposal to mitigate or eliminate interference problems to television, telephones, audio equipment, etc. The use of this device is a solution for colleagues who live on upper floors and the ground connection is difficult to install or the one we have is ineffective.



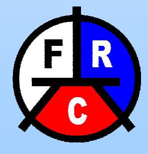
It is an artificial land or against antenna as many know it. This device is easy to build and its function is to complement our antenna system to radiate to the ether all the radio frequency that remains within our radio premises. This is possible through a tuned step and a wire thread that can be lying on the ground or on the eaves of the house to give an example.

The circuit is made up of a toroid with a few turns of wire to monitor the adjustment, a coil with several taps depending on the band, and a variable capacitor to couple to the wire that will be cut at a quarter wavelength of the working frequency.

Once the circuit is assembled, the device will be connected to the chassis of the transmitting equipment, the variable capacitor is adjusted until the maximum deflection of the instrument or the maximum illumination of the LED diode is achieved, depending on what is used. The potentiometer is to prevent the indicator (Ammeter or LED) from being damaged by high levels. More information about this device can be found on the internet under the name of counter antenna, for example the MFJ-931.

The elements that were used in the construction of this valuable device were: A saving bulb toroid for the adjustment sensor coil, the coil with the taps was built in a 1 ½ inch PBC tube with 12 turns of #18 wire . The variable capacitor used was recovered from a VEF206 radio. For the adjustment indicator, a red LED diode was used, with the help of the potentiometer it is possible to give greater or lesser intensity of illumination. The length of the wire was 10m for the 40m band. To check its operation, the multimeter and an RF tip are used to which a wire of about 30cm is soldered to the tip as an antenna, then it is located one or two meters from the transmitting equipment. At first, the RF level is measured in the radio room without placing the counter antenna to the radio, then the same test is done with the device connected, if everything is correct as the adjustment is made, the RF level indicated by the multimeter will go down to negligible values.

Successes in experimentation, I hope it gives you a good result.



Yoelis Laurencio Molina (CO8TDL)
Secretario Técnico Filial FRC Holguín



West Bengal Radio Club (Amateur Club)

West Bengal Radio Club (Amateur Club) is a non-profit organization founded by Mr. Ambarish Nag Biswas, VU2JFA. The organization was established in the year 2010 with the club station call sign VU2MQT at Sodepur High School (HS), Station Road, Sodepur, Kolkata – 700 110, West Bengal, India. The club conducts regular activities for the promotion of Amateur Radio Communication (HAM) in the state of West Bengal with the true support of Dr. Sudip Chowdhury, Principal of Sodepur High School (HS) and the National Institute of Amateur Radio (NIAR).), Hyderabad





WBRC OBJECTIVES

. To spread awareness of Amateur Radio Activity (HAM) among the people of West Bengal

. Conduct awareness and training programs for the Amateur Station Operator License Exam.

. To conduct seminars, workshops on amateur radio communications (HAM) and FOX Hunt.

. Help schools, colleges, institutions, individuals, climbers, etc. to form their own amateur radio clubs.

. Assist the various Amateur Radio Civil Emergency Services in all kinds of emergencies, natural or man-made calamities.

. The Technical wing of the Club encourages Hobbyists to build their own transceivers, power supply, antenna, etc.

More info: https://www.wbrc.in/



A benchmark in amateur radio

Mejor generador de contenido audiovisual sobre radioaficion 2021

The year was 2012 and a video Inside the heathkit SA2060 antenna coupler was the one that started a reference channel for radio amateurs.



TS 2000 con muy graves problemas de RX en todas l...
10.286 visualizaciones • hace 2 semanas



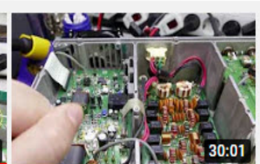
Icom IC 706MKIIG sin potencia de salida en HF
4900 visualizaciones • hace 2 meses



FT 897D de Yaesu con graves problemas de TX y RX
4225 visualizaciones • hace 2 meses



Raro de ver Alinco DX 77 para revisar
5373 visualizaciones • hace 3 meses



Estupendo Icom IC 756PRO3 que requiere atención medica
4800 visualizaciones • hace 3 meses



FT 857D con filtros cerámicos flamantes pero e...



Icom IC 7300 que requiere ayuda tras manipular el me...



Yaesu FT 847 con buenos mods y mantenimiento para...

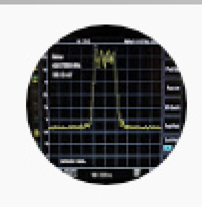


Yaesu FT 857D con sorpresa en los filtros ceramicos



TS 850S de Kenwood con graves problemas de TX

We are talking about Israel. r. the brand new winner of the contest organized by this publication as the best audiovisual content generator.
Surely many of us would not dare to scrutinize the interiors of our computers, something that Israel does in an entertaining, linear way and above all with a language that is easy to understand for those not so prepared for this matter.


Israel R
16.600 suscriptores

A voice and hands is what almost all of us know, perhaps in its wisdom, Israel has wanted to give priority to knowledge before self-advertising.
Without a doubt, he is a channel full of wisdom and his "let's go there" is the starting point of a free lesson.
For the second year Israel.r. has been awarded as the best content generator and it only remains for us to congratulate him and encourage him to continue revealing these breakdowns/solutions accompanied by those comments that undoubtedly make him the "Best generator of audiovisual content on the subject of amateur radio"



https://www.youtube.com/channel/UCNLlhtnAMHUcDBH9WAuncDQ/featured

Selvamar Noticias
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* La revista del Radioaficionado

EL QTH LOCATOR DE LOS RADIOAFICIONADOS

The Locator is a way devised by radio amateurs to succinctly express the location of an amateur radio station, or any other place of interest, at any point on the globe, based on the traditional terrestrial coordinate system (latitude-longitude).), but which is different from this one.

This location system is based on dividing the Earth's surface into grids, the grids being defined according to the terrestrial meridians and parallels, and that at a first level, they are large grids defined on the terrestrial world map. Each of these grids are subdivided into smaller grids (second level grids), which in turn are subdivided into even smaller grids (third level grids).

Therefore, instead of using the geographical coordinates of latitude and longitude, the Locator System uses an abbreviated system to identify the grids that is based on using pairs of alphanumeric characters: Each pair of characters represents a grid on the World Map: The first character pair identifies first level grids, the second character pair identifies second level grids, and the third character pair identifies third level grids. For each pair of characters, the first character represents geographic longitude data, and the second character represents geographic latitude data.

This has some advantages over the traditional latitude and longitude coordinate system. Thus, a central place in the city of Barcelona (Spain), such as Plaza de Cataluña, has a geographical longitude of 2º 10' East and a latitude of 41º 23' East, its location in the locator system would be specified as JN11cj. As you can see, it is shorter or abbreviated, and although it may seem a bit imprecise (compared to the traditional latitude-longitude coordinate system), it is sufficient for radio amateurs.

The Locator was thought of by Central European radio amateurs in the 1950s as a system to provide more "entities" for contests and diplomas (instead of "radio countries", or as it would be said today, "DX entities") in the radio bands. VHF and above. The activity of European radio amateurs on the VHF bands did not really start until after the Second World War, and it did not take long for many European radio amateurs to have on their record having been able to establish contacts with radio amateurs from all European countries active in VHF.

This motivated to provide a new incentive for radio amateurs eager for contacts, and a Locator system was first created in Central Europe, which was later extended to the rest of Europe and neighboring regions, which provided European radio amateurs eager for contacts with new entities, in the form of of locator grids. This first Locator system was evolved over time, adopting various names: "QRA Locator" first (1959), and "QTH Locator" later (1966).

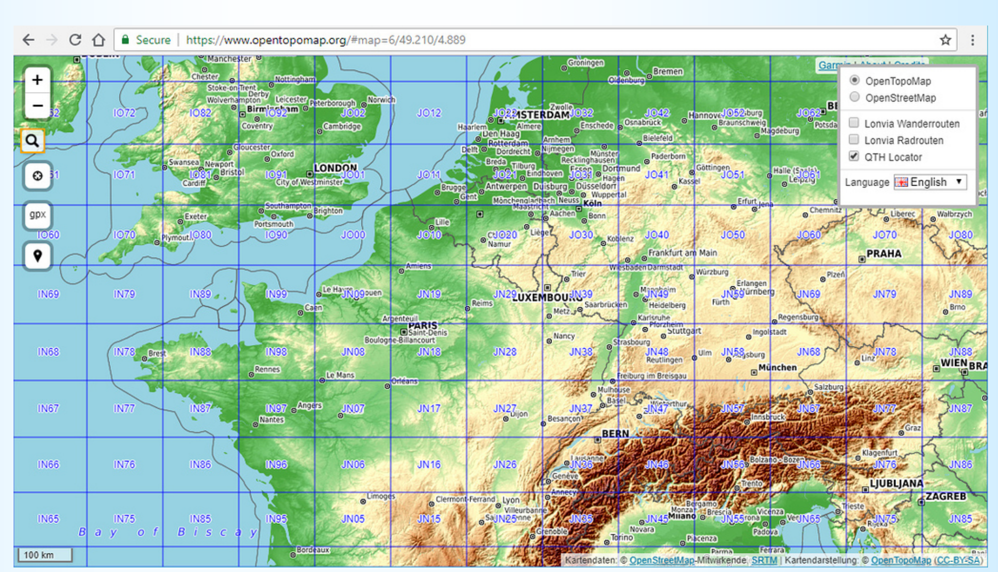


However, this geographic location system caught the attention of many radio amateurs in the rest of the world and proposals for a universal locator system were launched. The European locator system was sufficient to cover Europe, but totally insufficient to cover the entire earth's surface, and finally at the IARU Region 1 conference in 1978, held in the English town of Maidenhead (about 50 km west of London) , the current Locátor system, known as the "Maidenhead Locator System", was approved. Its final approval worldwide was from January 1, 1985 at the conference of Region 1 of 1984 in Cefalu (Sicily, Italy).

How does the current Locator system work?

The Locator system divides the world into grids or "grids", and each is identified by pairs of characters. The Maidenhead Locator system uses up to 3 pairs of characters, or 4 in an extended (unofficial) version, where the first pair of characters (two capital letters: A to S) identify large grids on the terrestrial world map (grids of first level), which are called "Fields" (Fields).

Each of these first level grids is in turn subdivided into smaller grids (second level grids), which are identified by the second pair of characters (two figures: 0 to 9), and which are called "squares".
" (Squares) and also "grid squares" (square grids). In turn, these grids are subdivided into new smaller grids (third level), which are identified by the third pair of characters (two lowercase letters: A to X) and are called "subsquares".



In the extended version, the fourth pair of characters (two figures: 0 to 9) allows the sub-grids (of three pairs of characters) to be subdivided into even smaller grids, the “extended squares”, increasing even more the location accuracy of the Locator system. This fourth pair of characters is not often used, as this extended version is not officially supported in the Maidenhead Locator system, but it provides more accuracy of the geographic location of a station or place.

On a world map with flat representation and cylindrical projection, such as the Mercator or Gall-Peters map, the different divisions appear as rectangular grids on the map (and of the same size in the case of Mercator world maps), which gives an appearance from grid to a world locator map (hence “Grid Locator”), but since the Earth is spherical, the locator divisions are not really rectangular, they are even triangular in the polar zones, and the size of the divisions depends on the latitude. This is due to how locator grids are geographically defined.

Depending on the needs and accuracy of the location, the localetor can be specified with one, two or three pairs of characters. For operations in HF bands, it is usually enough to use 4-character locators (identify "squares" or second level grids), while for the VHF and UHF bands (much lower reach than HF bands) are usually employed Locators of 6 figures (identify "subsquers"). Normally the fourth pair of characters (from the extended locator version, which provides maximum location accuracy) is not usually used. In any case, the characters in odd positions (first, third and fifth) represent the coordinates of geographical length, while the characters pairs (second, fourth and sixth) represent the coordinates of geographical latitude, and alternate the pairs of alphabetic characters With the numerical pairs, as seen in Figure 1.

FIGURE 1

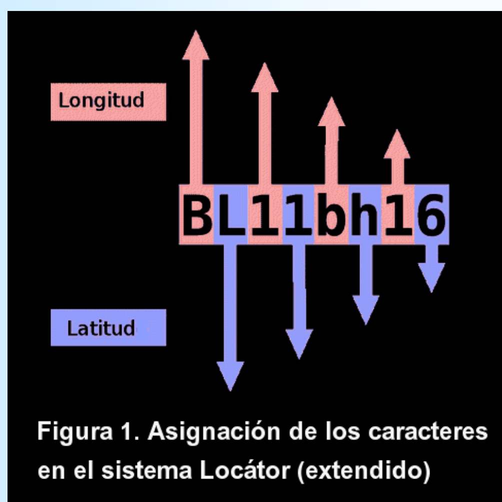


Figura 1. Asignación de los caracteres en el sistema Locátor (extendido)

For the first pair of characters, which identify the first level grids or "Grids", only letters are used, from A to the R (18 letters usable), expressed in capital letters. For the geographical length (first letter), it is part of the time line of Pacific dates, that is, from the land meridian of 180 degrees in length (the opposite of the Greenwich meridian), and in the direction of the east the first one is assigned the first Letter, starting with letter A, each terrestrial parallel arc of 20 degrees in length. With the first 18 letters of the alphabet, then, the 360 degrees of the land circumference are covered, then, the 360 degrees.

For the land latitude (second letter), the 18 letters are allocated, from A to the R, one every 10 degrees of terrestrial meridian, starting from the south pole towards the north pole.

This divides the surface of the Earth into 324 fields ("fields") or grids ("grids"), each with a size of 20º of the West Arch to East, and 10º of South Arch of North. According to this notation, for example, the peninsular territory of Spain would be inside the Grids in, IM, JN and something in the JM. The Canary Islands are in the il grid.

Figure 2 shows the 324 grids of the world Maidenhead Locator covering the entire terrestrial surface, along with the indications of terrestrial length and latitude.

Figure 2.


Figura 2. Rejillas de primer nivel del Locátor Maidenhead mundial.

For the second pair of characters of the locator, the figures 0 to 9 are used, and what is done is to divide each of the first level grids or grids into 100 smaller grids (grid 10x10), called "Squares". Each of these second level grids will have a size of 2 degrees of arc of geographic longitude to one degree of arc of geographic latitude. And as in the previous

case, the numbers are assigned from 0 to 9 from west to east, for the first character of this pair, and from south to north, for the second character of this pair, that is, starting from the lower left corner (southwest corner) of the corresponding first level grid, see figure 3.

FIGURE 3

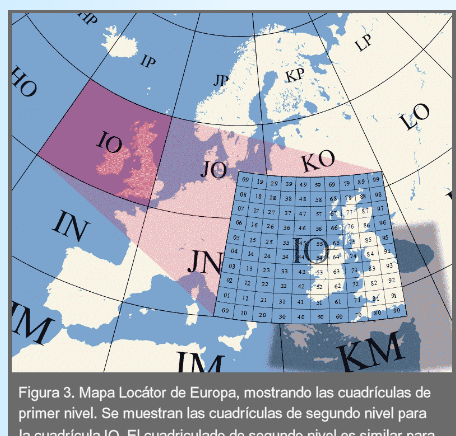


Figura 3. Mapa Locátor de Europa, mostrando las cuadrículas de primer nivel. Se muestran las cuadrículas de segundo nivel para la cuadrícula IO. El cuadriculado de segundo nivel es similar para las demás cuadrículas de primer nivel.

Finally, for the third pair of characters, the letters "a" to "x" are used in lower case, to divide the previous second level grids ("squares") into 576 smaller sub-grids called "subsquares" (24x24 grid), assigning the characters as in the previous cases: from "a" to "x" in an easterly direction (for the first character of the pair) and in a northerly direction (for the second character of this pair), and by both starting in the lower left corner (southwest corner) of the second level grid. Each of these sub-grids will have a size of 5 arcminutes of geographic latitude and 2.5 arcminutes of geographic longitude (the latter corresponds to 2.5 nautical miles). Reminder: One nautical mile, 1852 meters, corresponds to the longitude arc of one minute of the earth's circumference).

With these three pairs of characters, 32,400 locator sub-grids are defined to cover the entire earth's surface, and which allow the geographical location of any station or place on the earth's surface to be defined with a precision that is quite acceptable for the radio amateur. But if greater precision is required in the locator of a location, and although it is not formally defined in the Maidenhead Locator system, a fourth pair of characters is usually used, made up of the numbers 0 to 9, and which works similarly to the second pair of characters. This subdivides the "subsquares" (grids of three pairs of characters) into 100 smaller grids, but this is already totally informal and rarely used.

Finally to say that although the Locator belongs to the field of radio amateurs (in fact it was devised by radio amateurs), many current GPS receivers (not all) have included the presentation of geographic coordinates according to the Maidenhead Locator format of radio amateurs as a complement to the system traditional latitude-longitude coordinates.

Converters between geographical latitude-longitude terrestrial coordinates and locator locations are found on the Internet, mainly on amateur radio websites. There are also mobile (cell) phone apps to perform these conversions and/or calculate the user's current locator (search for 'QTH Locator' or 'Grid Square').

Automated amateur radio stations, such as repeater stations, radio beacons, etc... usually transmit along with their identification (their official callsign or QRA), their location (QTH) in the Locator system. Also, many radio amateurs indicate in their QSL the locator location of their station. However, in the other great field of radio hobby that is the Citizen Band (CB), the Locátor system is quite unknown and is practically not used.

Fernando Fernández de Villegas (EB3EMD)
Barcelona - España



MIR Space Station Launch Anniversary Diploma

Organized by the Costa Blanca Amateur Radio Cultural Association, (ACRACB) with the aim of promoting amateur radio, and publicizing the anniversary of the 1986 launch of the MIR space station

Date: From February 11, 2022 at 06:00 EA time to February 20, 2022 at 23:00 EA



Scope: All stations in the world in possession of the corresponding amateur radio license and SWL stations.

Bands:

HF – 20, 40 and 80m. One contact can be made by band, mode and day, one at 14 MHz, 7 MHz and another at 3.5 MHz. (Only Phone)

VHF – 145.425 Mhz.

DMR – TG – 21403 Provincial Alicante

CB – Channel 18 (27.175 MHz) (FM or USB) and Channel 37 (AM), Standard.

PMR446 – Channel 5 (446.05625 MHz, narrow FM, no subtone)

1) New stations wishing to adopt a CB or PMR446 callsign from the 30RKBnnn series should contact the Association, which will be assigned free of charge.

2) In this edition, and with the intention of making amateur radio known to the general public, anyone who owns an approved PMR446 free-use walkie-talkie is invited to participate, always complying with current legislation (maximum power 500 mW , built-in original antenna, narrow FM).

Call: “CQ, MIR Space Station Anniversary Diploma”.

Contest: Each collaborating station will award the following points, according to modalities:







See different scores in ; http://www.acracb.org/

Special prize: For the stations that obtain the most points in HF, VHF and DMR, they will receive a special diploma in Foam Board at no cost.

Among all the participants we will raffle a membership fee during 2022.

The diplomas will be downloaded from the ACRACB website in PDF format, if someone is interested in receiving it in Foam Board they will have to send €10 in stamps for printing and shipping costs.

Costa Blanca Amateur Radio Cultural Association.
PO Box 2117- 03080 Alicante
For any questions related to this diploma, we leave you the following email addresses so that you can go to the diploma in question:
hf_diplomas@acracb.org HF
dmr_diplomas@acracb.org DMR
vhf_diplomas@acracb.org VHF
pmr@acracb.org PMR
cb@acracb.org CB
http://acracb.org





ANNIVERSARY ERC-12-ANV

We are more and more adept at the Digital Modes, as we can see in the different clusters where it is shown, online, the stations that are active in phone and those that are in digital, in addition to the enormous number of Diplomas that are issued to through the UltimateAAC program. Until the time this article is written, we have issued more than 2.5 million Diplomas and the number of registered ERC exceeds 8,500 radio amateurs from all corners of the world. For this reason and because ERC is the first Spanish Radio Club in Digital Modes, we could not miss the opportunity, one more year, to celebrate our 12th Anniversary with the Radio Club EA5RKE callsign, coming out in all Digital Modes in which it is seen activity.

EUROPEAN ROS CLUB celebrates this year the twelve of its creation, for this reason the Diploma 12 ANNIVERSARY ERC has been created addressed to all radio amateurs in the world dedicated to DIGITAL MODES in accordance with the following



BASES

Diploma Name: ERC-12-ANV

Manager: YC2DSV

1.- This Diploma is open to all radio amateurs in the world and SWL.

2.- All QSOs made with the ERC callsign, EA5RKE, between February 2 at 00:00 and December 31 at 23:59 UTC 2022 will be valid.

3.- The application bands will be 2, 6, 10, 12, 15, 17, 20, 30, 40, 60, 80, and 160 meters, within the margins awarded by the IARU for Digital Modes.

4.- One contact per day will be valid in a different band and in a different mode with the broadcasting station EA5RKE.

5.- This Diploma consists of three categories:

BRONZE: with 2 contacts.

SILVER: with 3 contacts.

GOLD: with 5 contacts.

6.- The operators of the EA5RKE station, ERC Partners granting this diploma are:

EA4DCU EB5AG EA8IM

7.- ERC reserves the right to assign more operators if necessary.

8.- This diploma can be downloaded from the European Ros Club WEB page.

9.-The SWL stations You have to send an E-mail with your callsign, , for the preparation of the diploma, as well as the data of the different contacts
to the E-mail address.- diplomaserc@gmail.com

DESIGN- YB4FIK

Software development – YC2DSV

Webmaster – YC3FPI







EA7JOU



EA7FMT



CE3BMI



EA4HNZ



LU6EGD



LU8DFV



EA8C

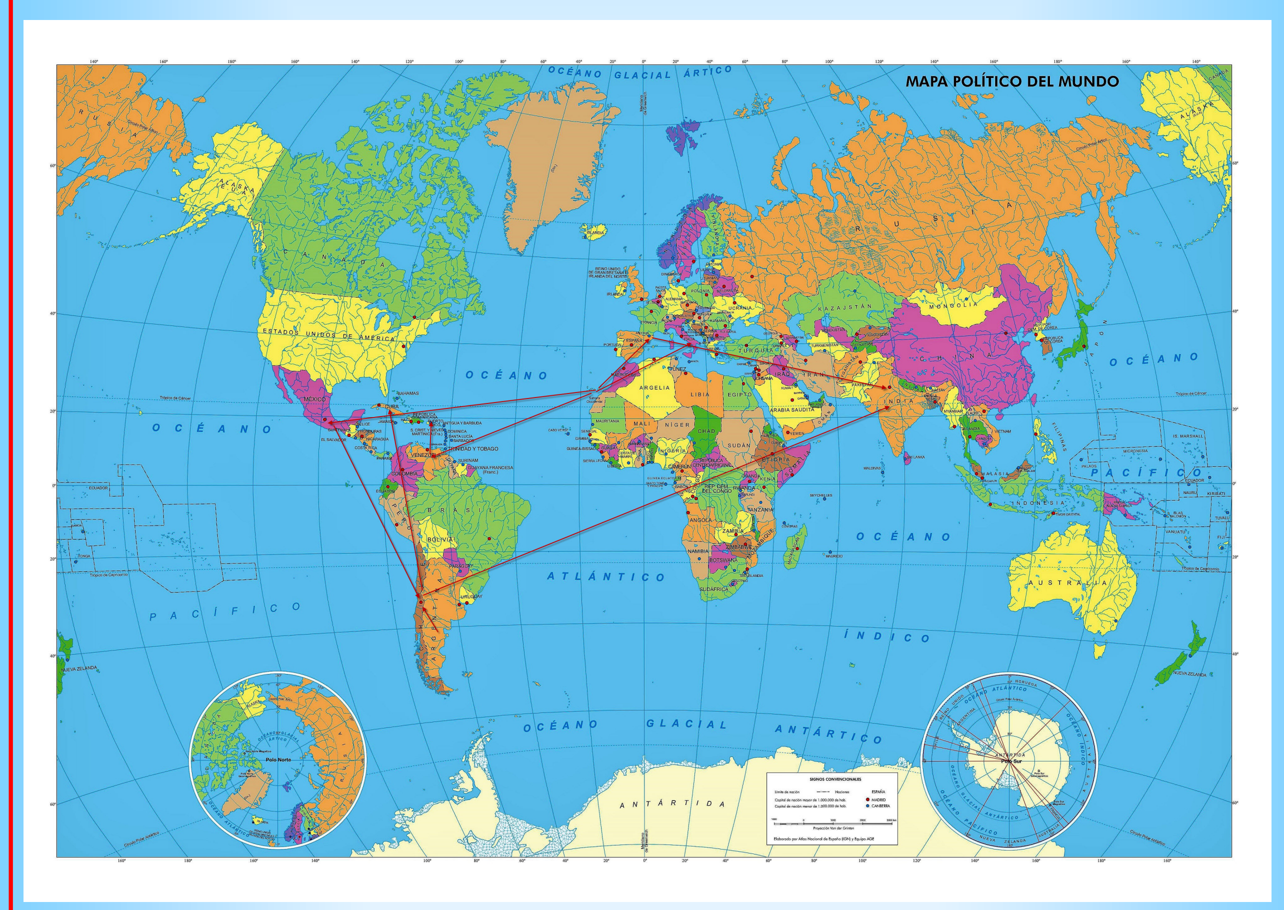


EA7KQK



The traveling QSL

The Traveling QSL continues its way, Chile, Mexico, Argentina, Puerto Rico, Italy, India, Spain, Cuba.
Maybe you'll be the next.







Activities and Activations









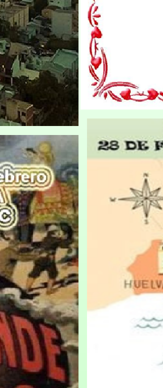
XIVº Edición
"FIN DE SEMANA DE LOS FAROS AMERICANOS"

del Viernes 18 al Domingo 20 de Febrero de 2022













Activities and Activations

FEBRUARY 21-27 SIMPSON WEEK

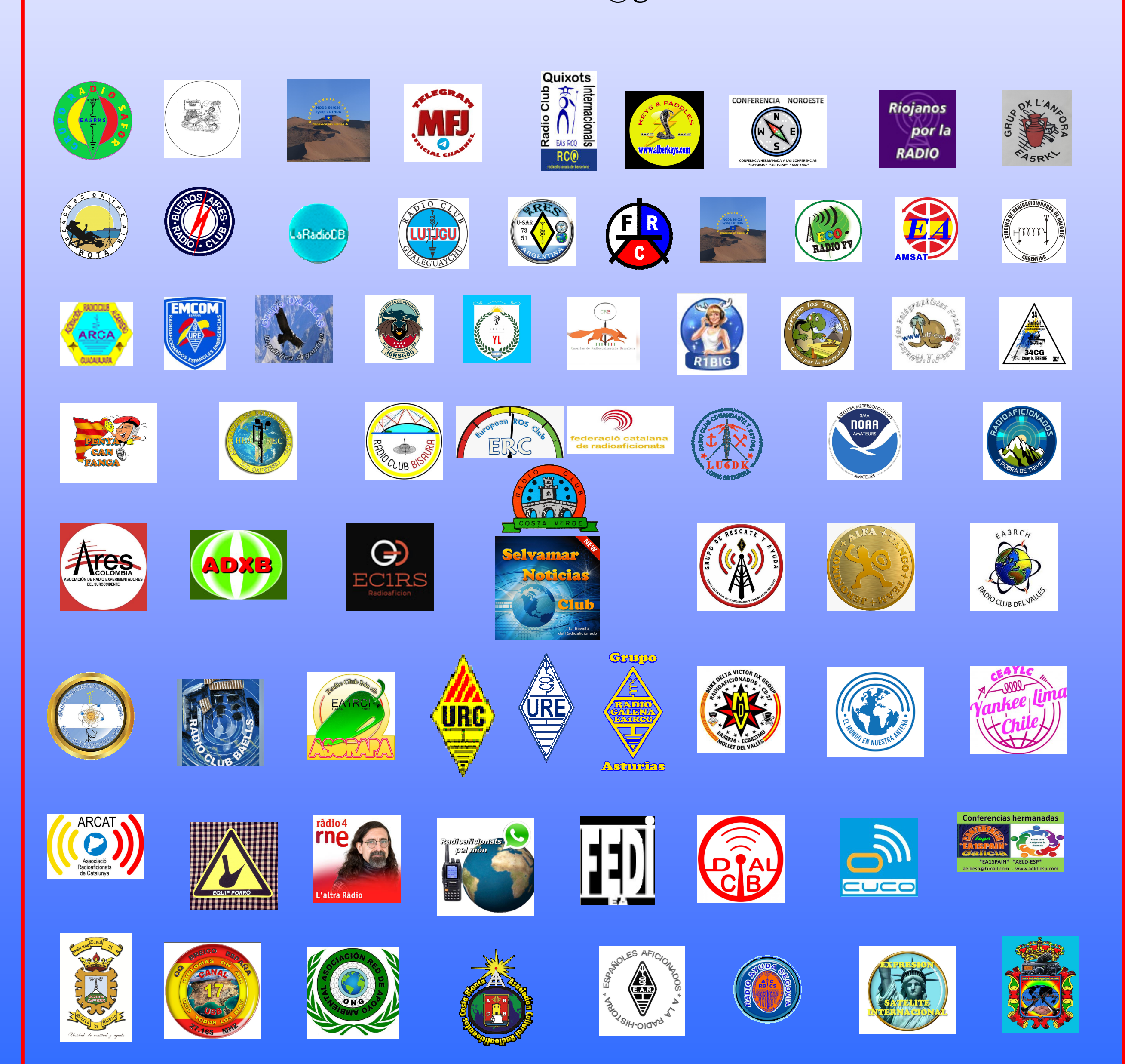
ECHOLINK

Selvamar Noticias
NEW
* La revista del Radioaficionado

"Selvamar News" Magazine

Whenever a project is started, doubts assail, but the illusion to carry it out prevails.
24 are already the deliveries of this humble publication made by and for radio amateurs.
24 months of "we did not arrive", 24 months of "finished magazine", 24 months of praise and criticism.
But we can be sure of one thing, the magazine will continue for time, every day with more enthusiasm, with more friends collaborating.
Sometimes we can't publish everything you send us or we make mistakes, we apologize.
From the editorial team of Selvamar Noticias we want to thank you and invite you to follow us in the different activities.

selvamarnoticias@gmail.com





Old Man knows that you are passionate about amateur radio and that is why Selvamar Noticias strives to find attractive content for you. Your suggestions and contributions are always welcome.

We are counting on you!

Old Man

fannet